#### RHODE ISLAND FIRE SAFETY CODE

Rules and Regulations Promulgated by the Board of Appeal and Review

# RHODE ISLAND FIRE SAFETY CODE SECTION 1 DECLARATION OF POLICY

It is the policy of the State of Rhode Island to simplify, clarify and modernize the law governing fires and fire prevention, and to specify reasonable minimum requirements for fire safety. It is the statutory directive and policy of the Fire Safety Code Board of Appeal & Review to adopt rules and regulations to safeguard life and property from the hazards of fire and explosives in accordance with safe practice as embodied in widely recognized standards of good practice for fire prevention and fire protection.

# RHODE ISLAND FIRE SAFETY CODE SECTION 2 CONSOLIDATION OF STATE FIRE SAFETY CODE

The Fire Safety Code sections 1 to 15, as adopted herein, along with the provisions of R.I.G.L. chapters 23-28.1 et seq. shall be known as the state Fire Safety Code.

# RHODE ISLAND FIRE SAFETY CODE SECTION 3

The provisions of the state Fire Safety Code sections 1 to 15 are adopted pursuant to R.I.G.L. 23-28.3-3 in an effort to supplement, clarify, and modernize the minimum requirements for fire safety in new and existing buildings and facilities as outlined in R.I.G.L. chapters 23-28.1 et seq.

# RHODE ISLAND FIRE SAFETY CODE SECTION 4 DEFINITIONS (RESERVED)

# RHODE ISLAND FIRE SAFETY CODE SECTION 5 FIRE SAFETY CODE BOARD OF APPEAL & REVIEW

The Fire Safety Code Board of Appeal and Review is an agency within the Public Safety Division of the Executive Department. The Governor appoints all eleven (11) members with the advice and consent of the Senate. Of the members of the Board of Appeal and Review, one shall be a representative of the permanent fire chiefs, one shall be a representative of the building inspectors, one shall represent industry, one shall be a licensed professional engineer, one shall be a representative of the fire protection industry, one shall represent labor, one shall be a licensed architect, one shall be a representative of the volunteer fire chiefs, and three (3) shall be representatives of the public. The Governor also designates a chairman for a two (2) year term

The Fire Safety Code Board of Appeal and Review is the sole authority having jurisdiction for administration and, with the exception of RIGL chapter 23-28.4, the State Fire Marshal is the sole authority having jurisdiction for enforcement of the Fire Safety Code. The Director of Labor has exclusive jurisdiction for the enforcement of RIGL chapter 23-28.4. Accordingly, the Fire Safety Code Board of Appeal and Review is the sole authority having jurisdiction to grant variances, waivers, modifications and amendments from, or to review and accept any proposed fire safety equivalencies and alternatives to, the strict adherence to the provisions of the Fire Safety Code and all referenced standards therein as previously enacted and/or adopted, herein and hereafter amended.

The Fire Safety Code Board of Appeal and Review is also the authority having initial jurisdiction to hear all appeals from any action taken by the State Fire Marshal's Office in its capacity as the authority having jurisdiction for the strict enforcement of the provisions of the Fire Safety Code and all referenced standards therein as previously enacted and/or adopted, herein and hereafter amended. Finally, the Fire Safety Code Board of Appeal and Review has initial jurisdiction to hear all appeals from any action taken by the Director of Labor in the enforcement of chapter 23-28.4 of the State Fire Code.

# RHODE ISLAND FIRE SAFETY CODE SECTION 6 ADMINISTRATIVE POWERS OF THE FIRE SAFETY CODE BOARD OF APPEAL & REVIEW

#### I. ADMINISTRATIVE APPEALS

#### 6-1-1

Any building owner may consult with the authority having enforcement jurisdiction for advice and assistance in complying with the provisions of the state Fire Safety Code. In cases of practical difficulty, the authority having enforcement jurisdiction shall refer all requests for variations, waivers, modifications and amendments from particular provisions of the state Fire Safety Code to the Board of Appeal and Review.

#### 6-1-2

All requests for proposed fire safety equivalencies and alternatives to strict compliance with the state Fire Safety Code shall likewise be referred to the Board of Appeal and Review.

#### 6-1-3

Any person aggrieved by an initial interpretation of any provision of the state Fire Safety Code, by the authority having enforcement jurisdiction of that code provision, may petition Board of Appeal and Review for review of the initial interpretation.

#### 6-1-4

The Board of Appeal and Review shall provide for reasonable interpretation of the provisions of the Fire Safety Code, and rule on appeals from decisions of the authority having enforcement jurisdiction.

# 6-1-5

All appeals shall be commenced by the filing of an appeal application form available at the offices of the Board of Appeal and Review and the State Fire Marshal.

# 6-1-6

The authority having enforcement jurisdiction shall assist the applicant by providing all code cites and documentation necessary to complete the application form.

# 6-1-7

When applicable, the authority having enforcement jurisdiction shall certify the total square footage of a subject facility on the application form.

#### 6-1-8

To be considered a completed application, the application form shall be completely filled out and signed by the owner or an authorized representative. The application shall further be accompanied by a filing fee and written inspection report, plan review report, interpretation or other related documentation generated by the authority having enforcement jurisdiction.

#### 6-1-9

Filing fees for applications involving specific existing or proposed buildings shall be set in accordance with the schedule outlined in RIGL 23-28.3-5(b) (1) & (2). Filing fees for all other appeals shall be set in accordance with the provisions of RIGL 23-28.3-5(b) (3).

#### 6-1-10

The requirement of a written inspection report, plan review report or other related documentation may be waived by the executive director and/or the chairman, upon consultation with the authority having enforcement jurisdiction, when, in the opinion of the executive director and/or the chairman, compliance with this requirement would impose a hardship on the applicant and/or the authority having enforcement jurisdiction.

#### 6-1-11

Any person, other than an attorney at law, who signs an application form as an authorized representative, shall provide the Board of Appeal and Review with a letter of authorization signed by the owner of the subject facility.

# **II. HEARINGS AND COURT APPEALS**

#### 6-2-1

The Board of Appeal and Review shall make a good faith effort to schedule all hearings within thirty (30) days of the receipt of a completed application sent to the Board by registered mail.

#### 6-2-2

Completed applications shall be scheduled, as far as practicable, in the order they were received by the Board of Appeal and Review. Multiple hearings from the same jurisdiction may be consolidated on a single hearing date in an effort to promote the efficient use of state and municipal resources.

#### 6-2-3

For good cause shown, a completed application may be scheduled for an expedited hearing by the executive director, with the approval of the chairman, upon the request of the applicant and/or the authority having enforcement jurisdiction and/or a court of competent jurisdiction.

#### 6-2-4

For the purposes of section 6-2-3, examples of good cause would be hearings which may directly or indirectly result in the issuance or denial of a building permit, a certificate of occupancy, a license, major finding, and hearings which, if delayed, would significantly interfere with a set construction schedule or a real estate closing.

#### 6-2-5

The chairman may delegate a subcommittee of the Board of Appeal and Review to conduct a hearing and take testimony from the petitioner.

#### 6-2-6

A subcommittee shall consist of one or more Board of Appeal and Review members accompanied by the executive director and/or the legal counsel.

#### 6-2-7

A subcommittee meeting may be administrative or onsite in nature. An administrative subcommittee meeting may involve the scheduling of cases, drafting of rules and regulations and/or the day-to-day administration of the office. An onsite subcommittee meeting involves a physical tour of the subject facility with notice to both the applicant and the authority having enforcement jurisdiction. The notes of the executive director and/or the legal counsel shall serve as the record of the subcommittee meeting.

#### 6-2-8

When appropriate for an administrative subcommittee, and in each case where an onsite subcommittee is assigned, the subcommittee shall make recommendations to the Board of Appeal & Review as to their findings within ten (10) days.

#### 6-2-9

If the applicant is aggrieved by the subcommittee's recommendations, as accepted, modified and/or rejected by the decision rendered by the Board of Appeal & Review, the applicant shall have the right to petition the Board of Appeal & Review, within thirty (30) days of the mailing date of the rendered decision. The applicant shall thereupon be scheduled for hearing before the full Board of Appeal & Review.

# 6-2-10

All full Board of Appeal & Review hearings shall be conducted in accordance with the provisions of RIGL 42-35-9 of the Administrative Procedures Act.

# 6-2-11

Anytime after the Board hearing, but before a final decision is mailed, the Board of Appeal & Review may reopen a case at the request of either the applicant or the authority having enforcement jurisdiction, for purpose of taking additional previously unavailable testimony and/or evidence and uphold, modify and/or reverse its original decision.

#### 6-2-12

Anytime after the final decision is mailed, the Board may, at the request of either the applicant or the authority having enforcement jurisdiction, and upon review of the record of the case, correct any administrative, clerical or other mistakes in the written decision to accurately reflect the record of the case. The resulting decision shall be entitled "amended decision".

#### 6-2-13

Any building owner aggrieved by any decision, modified decision or amended decision of the Board of Appeal & Review may, within thirty (30) days after the mailing date of the decision, modified decision or amended decision, commence an action in the Sixth Division of the District Court against the State Fire Marshal for review of the decision.

#### 6-2-14

The findings of the Board of Appeal & Review shall be conclusive unless clearly erroneous.

#### 6-2-15

A party aggrieved by a final order of the court may seek review thereof in the Supreme Court by petition for certiorari in accordance with the procedures contained in RIGL 42-35-16.

#### 6-2-16

Commencement of a court appeal of the Board of Appeal & Review's decision does not operate as an automatic stay of the decision. [RIGL 42-35-15(c)]

#### 6-2-17

The decisions of the Board of Appeal & Review covering specific facilities shall be considered comprehensive, integrated plans of fire safety for the subject facilities under the current use of occupancy. Accordingly, every variance granted is conditioned upon the applicant's timely and continued compliance with all of the directives of the Board of Appeal & Review. Every variance is further conditioned upon the continued use or occupancy of the subject facility under the occupancy classification reviewed by the Board in rendering its decision.

#### 6-2-18

Failure of the applicant to initially comply with the full decision of the Board of Appeal & Review within the stated time frame shall void all variances granted in the decision.

#### 6-2-19

In the event of complete, timely and continued compliance with the full decision of the Board of Appeal & Review, all variances shall be deemed vested in the facility as long as the facility remains within the occupancy classification reviewed by the Board of Appeal & Review, or the General Assembly adopts new standards covering all existing occupancies.

#### 6-2-20

In the event the use or occupancy classification of the subject facility is changed, as outlined in RIGL 23-28-1-6, all variances granted under the original use or occupancy are void and the facility shall be reviewed under the state Fire Safety Code provisions covering the newly created use or occupancy.

#### III RULES AND REGULATIONS

#### 6-3-1

The State Fire Safety Code Board of Appeal & Review shall have the power to promulgate, amend, and repeal rules and regulations to safeguard life and property from hazards of fire and explosives, consistent with the standards outlined in RIGL 23-28.3-3 and 42-35-1 through 8.

#### 6-3-2

There shall be established a standing subcommittee of the Board to review all proposed rules and regulations, amendments and repealers to the state Fire Safety Code.

#### 6-3-3

The standing Rules and Regulations Subcommittee shall be chaired by the vice chairman of the Board of Appeal & Review.

#### 6-3-4

The chairman and executive director shall be permanent members of the Rules and Regulations Subcommittee along with any additional board members appointed by the chairman.

#### 6-3-5

The Rules and Regulations Subcommittee shall report its findings, recommendations and proposed rules to the Board of Appeal & Review.

#### IV. CODE INTERPRETATIONS BY THE BOARD

#### 6-4-1

The Board of Appeal & Review, at the request of any party, shall provide interpretations of both the statutory provisions and the rules and regulations which comprise the state Fire Safety Code.

#### 6-4-2

Any party requesting an interpretation shall outline the specific request, along with all supporting documentation, in a letter addressed to the chairman of the Board of Appeal & Review.

#### 6-4-3

The chairman, upon consultation with the executive director, shall produce a draft interpretation to be presented to the full Board of Appeal & Review.

#### 6-4-4

The full Board may adopt, amend, or reject the proposed interpretation. The final interpretation, agreed upon by the full Board, shall be issued and numbered under a separate filing system for Board Interpretations.

# 6-4-5

There shall be no filing fee charged for Board Interpretations.

#### V. ABATEMENT

#### 6-5-1

The fire marshal, or his or her designee within the division, or a nonsalaried deputy state fire marshal in accordance with guidelines established by the fire marshal, has the authority to summarily abate any condition which presents immediate danger to life, which conditions shall include improper management or use of flammable and combustible materials, liquids and gasses, pyrotechnics, fireworks or explosives, malfunctioning automatic sprinklers, fire alarms and emergency lighting, malfunctioning heating and electrical systems, and blocked or inadequate exits or means of egress, and such other conditions as may be established by the Fire Safety Code Board of Appeal and Review. A failure to abate a condition that presents a clear and immediate danger to life shall be grounds for the person issuing the order to abate, to require

that the premises be vacated, which action shall be either authorized by the fire marshal or a designee of the fire marshal who has been given advanced written authority by the fire marshal to approve such actions.

#### 6-5-2

Upon the request of a building owner, or other party in interest, any abatement action, taken under the provisions of section 6-5-1 above, shall be subject to review by the Board of Appeal & Review on an expedited basis at the next scheduled hearing or considered on an emergency basis by the chairman or his or her designee, with appeal to the full Board.

#### 6-5-3

The chairman, on an emergency basis, or the full board, on an expedited basis, may uphold, modify or vacate any order issued pursuant to section 6-5-1. Any such action by the chairman may be appealed to the full board. Any such action by the board may be appealed to the district court.

#### RHODE ISLAND FIRE SAFETY CODE SECTION 7

# RHODE ISLAND UNIFORM FIRE CODE OF THE RHODE ISLAND FIRE CODE

The Uniform Fire Code of the National Fire Protection Association, Inc., Standard 1 (NFPA 1), 2003 edition, with appendices, except those portions specifically reserved, deleted, altered, added to, or otherwise amended as outlined in section 7 herein, and including all of the specific amendments to Standard 1, as outlined in section 7 herein, is hereby adopted by reference as the Rhode Island Uniform Fire Code. Copies of NFPA 1, 2003 edition, are available from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy Massachusetts 02269-9101. The National Fire Protection Association's telephone number is 1-800-344-3555.

Copies of the reservations, deletions, alterations, additions and other amendments to this code, also known as the Rhode Island Fire Code Section 7, will be initially made available at the offices of the Rhode Island Fire Safety Code Board of Appeal and on the Fire Board's website at <a href="https://www.fsc.state.ri.us">www.fsc.state.ri.us</a>. Copies shall subsequently be available from LexisNexis/Matthew Bender & Co., 1275 Broadway, Albany, N.Y. 12204-2694. The LexisNexis telephone number is 1-800-562-1197.

The State Fire Marshal is the sole authority having jurisdiction for the strict enforcement of the Rhode Island Uniform Fire Code. The Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction for administration of the Rhode Island Uniform Fire Code. Accordingly, the Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction to grant variances, waivers, modifications and amendments from, or to review and accept any proposed fire safety equivalencies and alternatives to, the strict adherence to the provisions of the Rhode Island Uniform Fire Code and all referenced standards therein.

For the purposes of uniform administration, all exceptions listed in the Rhode Island Uniform Fire Code and its referenced standards, allowing for a discretionary waiver by the authority having jurisdiction, shall be referred directly to the Fire Safety Code Board of Appeal & Review as outlined in Fire Safety Code section 6-1-1 et seq. The only official formal and binding interpretations of the provisions of the Rhode Island Uniform Fire Code and its referenced standards are those approved and published by the Fire Safety Code Board of Appeal & Review pursuant to the procedures outlined in Fire Safety Code Section 6-1-3 et seq.

All new buildings and structures, for which a building permit is issued on or after February 20, 2004, shall be subject to the provisions of the Rhode Island Uniform Fire Code addressing the new occupancy.

All existing buildings and structures, and those buildings and structures for which a building permit was issued prior to February 20, 2004, shall be subject to the provisions of the Rhode Island Uniform Fire Code addressing the existing occupancy.

Any existing building or structure, subject to the provisions of the Rehabilitation Building and Fire Code for existing Buildings and Structures, shall also comply with the existing occupancy provisions of the Rhode Island Uniform Fire Code addressing the current or proposed occupancy.

All other fire safety requirements, along with the regulation of hazards and processes, listed in the Rhode Island Uniform Fire Code, shall become effective on January 1, 2004.

All existing fire protection systems, such as sprinklers, fire alarms, emergency lighting and exit signs, installed in existing buildings, shall continue to be properly maintained.

The effective date of the occupancy sections of the "*Rhode Island Uniform Fire Code*" shall be February 20, 2004. The effective date of the remaining sections of the "*Rhode Island Uniform Fire Code*", regulating all other hazards and processes, shall be January 1, 2004.

The provisions of NFPA 1, 2003 edition, as amended and referenced below, and incorporated herein as the "*Rhode Island Uniform Fire Code*" shall be *Code*", shall be preceded by the acronym "RIUFC". All of the remaining provisions of NFPA 101, 2003 edition, adopted as the "*Rhode Island Uniform Fire Code*", but not specifically addressed below, shall likewise be identified by the acronym "RIUFC" preceding it. (Accordingly, "Chapter 1" below would be identified as "RIUFC 1". Likewise, "Section 1.1.2" below would be identified as "RIUFC 1.1.2".)

# PART I ADMINISTRATIVE

# CHAPTER 1 ADMINISTRATION

#### (Amd) 1.1.2

The title of this Code shall be the "Rhode Island Uniform Fire Code" and may be cited as such.

#### (Add) 1.1.3

The "*Rhode Island Uniform Fire Code*" is hereby adopted pursuant to R.I.G.L. sections 23-28.3.3 23-28.1-2.

# (Amd) 1.4.1 Equivalencies.

Nothing in this Code is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety, as determined by the Fire Safety Code Board of Appeal & Review, to those prescribed in this Code, provided a request for variance is submitted to the Fire Safety Code Board of Appeal & Review along with technical documentation to demonstrate equivalency and the system, method, or device is approved for the intended purpose.

#### (Amd) 1.4.2 Alternatives.

The specific requirements of this Code may be modified by the Fire Safety Code Board of Appeal & Review to allow alternative arrangements that will secure nearly equivalent fire safety as practical.

# (Amd) 1.4.3 Modifications.

The Fire Safety Code Board of Appeal & Review is authorized to modify any of the provisions of this Code upon application in writing by the owner, lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of the Code, provided that the intent of the Code shall be complied with, public safety secured, and substantial justice done.

#### (Amd) 1.4.4

Buildings with alternative fire protection features approved by the Fire Safety Code Board of Appeal & Review, shall be considered as conforming with this Code.

#### (Amd) 1.4.5

Each application for variance to allow for an alternative fire protection feature shall be filed with the Fire Safety Code Board of Appeal & Review pursuant to the provisions of the Fire Safety Code section 6-1-1 et seq. and R.I.G.L. chapter 23-28.3. Each application shall further be accompanied by such evidence, letters, statements, results of tests, or other supporting information as may be required to justify the request. The Fire Safety Code Board of Appeal & Review shall keep a record of all actions on such applications. A written comprehensive Decision shall be signed by both the Chairman or the Board member who chaired the hearing, along with the attorney on the Board's permanent staff (Executive Director or Legal Counsel) who drafted the Decision for the Board's approval. A signed Decision shall be forwarded to the Applicant, the State Fire Marshal and the local fire officials. Unless specifically noted to the contrary, the effective date of the Decision shall be the mailing date listed therein.

# (Amd) 1.4.6

The Fire Safety Code Board of Appeal & Review shall approve such alternative construction systems, materials, or methods of design when it is substantiated that the standards of this Code are at least equaled. If, in the opinion of the Fire Safety Code Board of Appeal & Review, the standards of this Code shall not be equaled by the alternative requested, the requested relief shall not be granted. Consideration shall be given to test or prototype installations.

#### (Amd) 1.6 Enforcement.

This Code shall be administered by the Fire Safety Code Board of Appeal & Review and enforced by the State Fire Marshal.

#### (Add) 1.6.1 Enforcement Jurisdiction.

The State Fire Marshal is the sole authority having jurisdiction for the strict enforcement of the provisions of this code. The state Fire Marshal shall have authority to appoint and certify as many deputy state fire marshals and assistant deputy state fire marshals as are deemed necessary to strictly enforce the provisions of this Code. Accordingly, all deputy state fire marshals shall

be allowed to enforce this code as long as they maintain their certification in the above positions by the State Fire Marshal.

# (Amd) 1.7.1 Administration Jurisdiction.

The Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction for the administration of this Code. Accordingly, the Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction to grant variances, waivers, modifications and amendments from, or to review and accept any proposed fire safety equivalencies and alternatives to, the strict adherence to the provisions of this Code and all referenced standards herein. For purposes of uniform administration, all exceptions listed in this Code, and its referenced standards, allowing for a discretionary waiver by the authority having jurisdiction, shall be referred directly to the Fire Safety Code Board of Appeal & Review as outlined in Fire safety Code section 6-1-1 et seq.

# (Amd) 1.7.4 Delegation of Authority.

The State Fire Marshal may delegate to his or her Deputy State Fire Marshal, Division Chiefs, other members of the staff, and any other qualified individuals, such powers as are necessary for the proper enforcement of the Code. The Fire Safety Code Board of Appeal & Review may delegate to its appointed staff such powers as are necessary for the proper administration of this Code

#### (Amd) 1.7.5.1

The State Fire Marshal is authorized to inspect, at all reasonable times, any building or premises for dangerous or hazardous conditions or materials as set forth in this Code and the general provisions of the Fire Safety Code. The State Fire marshal may order any person(s) to remove or remedy such dangerous or hazardous condition or material. Any person(s) failing to comply with such an order shall be in violation of the Fire Safety Code. Any person so charged with a violation of the Fire Safety Code shall have the right to appeal the order of the State Fire Marshal to the Fire Safety Code Board of Appeal & Review. An appeal does not automatically stay the State Fire Marshal's order. However, the Chairman of the Board, or his designee, may, for good cause shown, stay the order of the State Fire Marshal pending review by the full Board.

#### (Amd) 1.7.6. Abatement.

The State Fire Marshal, or his or her designee within the division, or an assistant deputy state fire marshal in accordance with the guidelines established by the State Fire Marshal and with the State Fire Marshal's approval, has the authority to summarily abate any condition which presents immediate danger to life, which conditions shall include improper management or use of flammable and combustible materials, liquids and gasses, pyrotechnics, fireworks or explosives, malfunctioning heating and electrical systems, and blocked or inadequate exits or means of egress, and other such conditions as may be established by the Fire Safety Code Board of Appeal & Review. A failure to abate a condition that presents a clear and immediate danger to life shall be grounds for the person issuing the order to abate, to require that the premises be vacated, which action shall be either authorized by the State Fire Marshal or a designee of the State Fire Marshal who has been given advanced written authority by the State Fire Marshal to approve such actions.

#### (Add) 1.7.6.1 Appeal of Abatement.

Any person subject to the abatement procedure as outlined in section 1.7.6, shall have the right to appeal the order of the State Fire Marshal to the Fire Safety Code Board of Appeal & Review. An appeal does not automatically stay the State Fire Marshal's order. However, the Chairman of the Board, or his designee, may, for good cause shown, stay the order of the State Fire Marshal pending review by the full Board.

# (Amd) 1.10 Fire Safety Code Board of Appeal & Review.

# (Amd) 1.10.1.1

The Fire Safety Code Board of Appeal & Review was originally created in 1966 as the Fire Safety Code Commission. The current composition of the Fire Safety Code Board of Appeal & Review is outlined in R.I.G.L. 23-28.3-2 and Fire Safety Code Section 5.

#### (Amd) 1.10.2

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing administrative appeals, are outlined in Fire Safety Code sections 6-1-1 through 6-1-11.

# (Amd) 1.10.3

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing administrative hearings and court appeals, are outlined in Fire Safety Code sections 6-2-1 through 6-2-20.

# (Amd) 1.10.4

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing the Fire Board's rule making authority, are outlined in Fire Safety Code sections 6-3-1 through 6-3-5.

#### (Amd) 1.10.2

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing code interpretation by the Fire Board, are outlined in Fire Safety Code sections 6-4-1 through 6-4-5.

#### (Amd) 1.10.3.1

Members of the Fire Safety Code Board of Appeal & Review, shall comply with the Rhode Island Code of Ethics as outlined in R.I.G.L. 36-14-1 et seq.

#### (Amd) 1.10.3.2

Members of the Fire Safety Code Board of Appeal & Review, shall not sit in judgment and vote on any case in which the member, personally, is directly interested. If the actual interest of the member is unclear, the member should abstain from voting and then request an advisory opinion from State Ethics Commission before participating in comparable cases in the future.

#### (Amd) 1.10.5.1

The Fire Safety Code Board of Appeal & Review generally meets at least once each week in formal session and throughout the week in subcommittee sessions. All formal meetings are conducted pursuant to the Rhode Island Administrative Procedures Act (R.I.G.L. 42-35-1 et seq.)

and notice is provided pursuant to the Rhode Island Open Meetings Act (R.I.G.L. 42-46-1 et seq.)

# (Add) 1.10.5.1.1

Notice is hereby provided, pursuant to R.I.G.L. 42-46-6(a), that the formal meetings of the Fire Safety Code Board of Appeal & Review are currently scheduled on Tuesday afternoons at 1:00 PM. The meetings are currently located in Conference Room "C", on the second floor of the Department of Administration Building, One Capitol Hill, Providence, R.I. Please consult our website at www.fsc.state.ri.us. for specific information on the formal weekly hearings.

# (Amd) 1.10.6.

Pursuant to R.I.G.L. 23-28.3-2(b), the actions on appeals shall be determined by a majority vote by members with at least five (5) members in accord on any decision.

#### (Amd) 1.10.8 Procedures.

The Fire Safety Code Board of Appeal & Review's rules, governing its procedures, are found in Section 6 of the Fire Safety Code.

#### (Amd) 1.10.9.2

An appeal shall be submitted directly to the Fire Safety Code Board of Appeal & Review pursuant to the Fire Board procedures outlined in Section 6 of the Fire Safety Code and R.I.G.L. 23-28.3-5.

#### (Amd) 1.11.1

The State Fire Marshal shall maintain a properly indexed record of all variances in his or her office pursuant to R.I.G.L. 23-28.3-5(b). This record shall be open to the public for inspection.

# (Amd) 1.14.3

The AHJ shall approve or disapprove the completed set of plans within a reasonable time, not to exceed ninety (90) days.

# (Add) 1.14.3.1 Plans Review Fees.

Every request for plan review, by the State Fire Marshal's office, under the provisions of the Fire Safety Code shall be accompanied by the fee prescribed in this section. Plan review fees shall be as follows:

Cost of Construction:	Required Fee:
\$500 or less	\$25
Over \$500 but not over \$1,000	\$35
Over \$1,000 but not over \$2,000	\$45
Over \$2000 but not over \$500,000	\$45+
(plus \$6.00 per \$1,000 or fraction thereof over \$2,000)	
Over \$500,000	\$3,033+
(plus \$4.00 per \$1,000 or fraction thereof over \$500,000)	

# (Add) 1.14.3.2

All fees collected by the State Fire Marshal under 1.14.3.1 shall be deposited as general revenue.

# (Add) 1.14.3.3

Plan review fees, not exceeding the amounts listed in section 1.14.3.1, may be collected by the Assistant Deputy Fire Marshals of the municipal fire departments, pursuant to municipal ordinance. All such fees shall be utilized exclusively for supporting the operations of the municipal fire prevention bureau.

# (Add) 1.14.3.4

Applications for plan review shall be made on the forms provided by the State Fire Marshal.

#### (Add) 1.14.3.5

The application shall be accompanied by a plan review fee in accordance with either section 1.14.3.2 for state review or section 1.14.3.3 for local review (if approved by municipal ordinance).

# (Add) 1.14.3.6

The application shall be accompanied by not less than four (4) copies of construction drawings drawn to scale with sufficient clarity and detailed dimensions to show the nature and character of the proposed work.

# (Add) 1.14.6

When any plan review is appealed, or when any variance request relates to a current or proposed future plan review, the state or local fire marshal conducting, or ultimately responsible for, the plan review shall, upon request of the Fire Safety Code Board of Appeal & Review, appear before the Board and advise the Board as to the position of the applicable state or local fire marshal's office.

# CHAPTER 2 REFERENCED PUBLICATIONS

#### (Add) 2.2.1 Additional NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101

NFPA 720, Recommended Practice for the Installation of Household Carbon Monoxide (CO)Warning Equipment, 2003 edition.

CHAPTER 3
DEFINITIONS

# CHAPTER 4 GENERAL REQUIREMENTS

# CHAPTER 5 PERFORMANCE-BASED OPTIONS

CHAPTER 6 RESERVED

CHAPTER 7 RESERVED

CHAPTER 8 RESERVED

CHAPTER 9 RESERVED

# **PART II GENERAL**

CHAPTER 10 GENERAL FIRE SAFETY

CHAPTER 11 BUILDING SERVICES

# CHAPTER 12 FEATURES OF FIRE PROTECTION

# CHAPTER 13 FIRE PROTECTION SYSTEMS

# (Add) 13.6.7 Sales, leasing and servicing.

The sales, leasing and servicing of portable fire extinguishers and the installation and servicing of fixed fire extinguishing systems shall be in accordance with the provisions of section 13.6.7.1 et seq. of this Code.

(Add) 13.6.7.1 General

# (Add) 13.6.7.1.1 Issuance Of Certificate Of Registration:

- a. Any firm desiring to engage in the business of servicing portable fire extinguishers shall make a written application to the State Fire Marshal on forms provided by that Division. A Certificate of Registration shall be required for each separate location where there are facilities to service extinguishing equipment. The application must be signed by the sole proprietor, or each partner, or by an officer of the corporation.
- b. Any firm desiring to engage in the business of installing, repairing and servicing fixed systems shall make a written application to the State Fire Marshal on forms provided by that Division. A Certificate of registration shall be required for each separate location where there are facilities to service extinguishing equipment. The application must be signed by the sole proprietor, or each partner, or by an officer of the corporation.
- c. A firm must be the holder of both Certificates of Registration in order to service portable fire extinguishers and to engage in the business of installing, repairing and servicing fixed systems. No person(s) shall service portable fire extinguishers or install, repair and service fixed systems without first obtaining the appropriate license to do so.

# (Add) 13.6.7.1.2.

If the State Fire Marshal finds, after reviewing the applicant's record, that the granting or renewing of a Certificate of registration would not be contrary to public safety and welfare, it shall issue or renew such Certificate of Registration authorizing the applicant to engage in the business of selling or leasing portable fire extinguishers, or selling or leasing fixed systems or both, provided the requisite fee(s) have been paid. Each Certificate of Registration shall be assigned an identifying number.

# (Add) 13.6.7.1.3

All persons engaged in the business of servicing, installing, repairing and testing portable/fixed fire extinguisher systems shall be required to pass an examination administered by the State Fire Marshal.

# (Add) 13.6.7.1.4 Examination Of Applicants

The examination shall test applicant's ability, knowledge and skill as may be applicable to the type of certificate being sought, as generally indicated in the listing below. These written examinations shall consist of multiple choice, fill-in, true or false or essay questions.

- a. Portable fire extinguishers: charging, recharging, altering, repairing, testing, inspection, installation and servicing.
- b. Engineered fixed fire extinguishing systems: charging, recharging, altering, repairing, testing, inspection, installation and servicing.
- c. Pr-engineered fixed fire extinguishing systems: same as "b" above.

d. Hydrostatic testing of fire extinguishers and cylinders for fixed systems: self-explanatory.

# (Add) 13.6.7.1.5

These examinations shall be held at such places and at such times as the State Fire Marshal deems necessary, but must be within 30 days of receipt of application.

# (Add) 13.6.7.2 License/Permits

# (Add) 13.6.7.2.1 Issuance Of License

Upon successful completion of an examination, the State Fire Marshal shall issue a license having an identifying number to the Applicant.

# (Add) 13.6.4.2.2 Issuance Of Apprentice Permit

Any person desiring to service portable fire extinguishers and/or fixed systems, as an apprentice, shall file an application for a permit on forms provided by the State Fire Marshal. The application must be signed by the employer who holds an appropriate certificate of registration. The prescribed fee shall be paid at time of filing.

# (Add) 13.6.7.2.3

An Apprentice shall not service any portable fire extinguishers and/or fixed systems except under the personal and immediate supervision of a journeyman holding a valid license to install repair and/or service fixed fire extinguishing systems.

# (Add) 13.6.7.2.4

The State Fire Marshal shall issue each Apprentice Permit an identifying number and each such permit shall be readily identifiable as an Apprentice Permit for portable fire extinguishers or fixed systems. Time served as an apprentice must be a minimum of six (6) months for fixed systems; four (4) months for portable fire extinguishers.

# (Add) 13.6.7.2.5

An Apprentice Permit shall be valid for a period of one (1) year from date of issuance.

#### (Add) 13.6.7.2.6

An apprentice desiring to remain as same beyond the expiration date of said permit must make application for a new permit.

# (Add) 13.6.7.2.7 Issuance Of Hydrostatic Testing Approval

Upon successful completion of a written exam, an applicant may be issued a certificate or license with "Hydrostatic Testing Approved" stamped thereon.

#### (Add) 13.6.7.2.8

Services performed after the expiration of certificates, licenses or permits issued by the State Fire Marshal shall be deemed a violation of these regulations.

#### (Add) 13.6.7.2.9

Duplicates may be issued by the State Fire Marshal to replace any valid licenses and/or permits which have been lost or destroyed. Written documentation of loss and a ten dollar (\$10.00) fee will be required.

# (Add) 13.6.7.2.10 Renewal Of Licenses Or Certificates

All licenses or certificates must be renewed by March 1, annually.

# (Add) 13.6.7.3 Fees

# (Add) 13.6.7.3.1

Initial fee for certification for firms selling, leasing, or servicing portable fire extinguishers is \$100.00.

#### (Add) 13.6.7.3.2

Initial fee for certification of firms installing repairing and/or servicing fixed extinguishing systems is \$100.00.

#### (Add) 13.6.7.3.3

Renewal of certification for firms selling, leasing or servicing portable fire extinguishers is \$100.00 annually.

# (Add) 13.6.7.3.4

Renewal of certification for firms installing, repairing and servicing fixed fire extinguishing systems is \$100.00 annually.

### (Add) 13.6.7.3.5

Initial fee for examination and license for portable fire extinguisher journeyman is \$60.00.

#### (Add) 13.6.7.3.6

Initial fee for examination and license for fixed fire extinguishing systems journeyman is \$60.00.

#### (Add) 13.6.7.3.7

Renewal of journeyman Licenses is \$50.00 annually.

#### (Add) 13.6.7.3.8

Fee for portable fire extinguishers Apprentice Permit is \$5.00.

#### (Add) 13.6.7.3.9

Fee for fixed fire extinguishing Apprentice Permit systems is \$5.00.

# (Add) 13.6.7.4. Administrative

#### (Add) 13.6.7.4.1

By March 1st of each year, holders of a Certificate of Registration shall report annually the name, address, license number, and Apprentice Permit number of each licensee and apprentice in their employ to the State Fire Marshal.

# (Add) 13.6.7.4.2

The State Fire Marshal shall keep and maintain records of all licenses, apprentice permits and Certificates of Registration. Such records shall be available for review by any person desiring to review same. Records may be reviewed by appointment only.

#### (Add) 13.6.7.4.3

The licensing and registration provisions of Section 13.6.7, and its subsections, shall not apply to any firm which services only its own portable fire extinguishers for its own use by maintaining its own fire extinguisher servicing facilities adequate for the purpose and utilizing its own personnel specifically trained by the State Fire Marshal's office, for such servicing.

#### (Add) 13.6.7.4.4

When a person or firm exempt from the licensing provisions as provided under Section 13.6.7.4.3 services a portable fire extinguisher, he shall affix thereto a tag that at least states:

- a. The month and year when the service was performed.
- b. Manufacturer and serial number.
- c. The name of the person performing the services.
- d. The type of service performed.

# (Add) 13.6.7.5. Service Tags For Fixed Fire Extinguishing Systems And Portable Fire Extinguishers

Service tags are required and shall be in conformity with the following provisions:

#### (Add) 13.6.7.5.1

Tags shall be not more than and not less than five and one-fourth inches (5 1/4") in height, and two and five-eighths inches (2 5/8") in width. Service tags shall not be red in color.

#### (Add) 13.6.7.5.2

One service tag shall be attached to each fixed extinguisher system and each portable extinguisher in such a position as to be conveniently inspected, but not to hamper the operation of the system/ extinguisher.

#### (Add) 13.6.7.5.3

Service tags may be printed or otherwise established for any number of years not in excess of five (5) years.

#### (Add) 13.6.7.5.4

Every tag attached to a system serviced by a licensed firm shall be an approved service tag conforming to these rules and regulations.

# (Add) 13.6.7.5.5

Service tags shall bear the following information:

- a. Servicing firm's name
- b. Address of servicing firm
- c. Certificate of registration number
- d. Type of service performed
- e. Date service performed
- f. License number of individual who performed or supervised the service or services performed.
- g. Apprentice permit number when applicable
- h. Signature of licensee
- i. Owner and location of extinguisher

#### (Add) 13.6.7.5.6

All above information in Items 1 through 7 shall appear on one (1) side of the service tag. Other printing or information shall be placed on the reverse side of the tag.

#### (Add) 13.6.7.5.7

No person or persons shall remove, deface, modify or alter any valid service tag attached to or required to be attached to any fixed fire extinguisher system or portable fire extinguishers.

# (Add) 13.6.7.5.8

The State Fire Marshal may either refuse to issue or renew, or it may suspend or revoke any Certificate of Registration, License, Apprentice Permit or Hydrostatic Testing Approval for any of the following reasons:

- a. Any violation as listed in the Enabling Act.
- b. Having obtained or having attempted to obtain a License, Apprentice Permit, Hydrostatic Testing Approval or Certificate of Registration, by fraudulent misrepresentation.
- c. Gross malpractice or gross incompetency.

- d. Advertising for the sale or servicing of fixed or portable fire extinguisher system by means of knowingly false or deceptive statements.
- e. Violation of any provision of these regulations.

# (Add) 13.6.7.6 Appeals

# (Add) 13.6.7.6.1

Any person, firm, corporation and/or co-partnership aggrieved by the decision of the State Fire Marshal to suspend, revoke or refuse to issue or renew a permit may petition the Fire Safety Code Board of Appeal & Review for a hearing pursuant to section 6-1-1 et seq. of the Fire Safety Code.

# 13.7 Detection, Alarm and Communications Systems.

# (Add) 13.7.1.1.1

Exception: Existing fire alarm systems that are in full compliance with the provisions of Chapter 8<sup>1</sup> of the Rhode Island Fire Prevention Code<sup>2</sup> [2002 edition] at the time of the adoption of this Code shall be permitted to be continued in use, subject to the approval of the AHJ. Provided however, that the requirements of 13.8.9.1 shall apply to all places of assembly, new and existing.

# (Add) 13.7.1.1.2

The provision of 13.8.10.9, Maintenance of the System, shall apply to all systems, new and existing.

# (Res) 13.7.1.4.9 through 13.7.4.7.6

Sections 13.7.1.4.9 through 13.7.4.7.6 of the Rhode Island Uniform Fire Code are hereby reserved pending future review by the Rules and Regulations Subcommittee of the Fire Safety Code Board of Appeal & Review.

#### (Res) 13.8.1 through 13.8.6

Sections 13.8.1 through 13.8.6 of the Rhode Island Uniform Fire Code are hereby reserved pending future review by the Rules and Regulations Subcommittee of the Fire Safety Code Board of Appeal & Review.

# (Add) 13.8.7

Fire Alarm Systems.

# (Add) 13.8.7.1

All buildings and facilities covered under the RI Uniform Fire Code, and all codes adopted pursuant thereto, shall be equipped with an approved fire alarm system installed maintained and tested in accordance with this chapter and any updated fire alarm regulations adopted by the Fire

<sup>&</sup>lt;sup>1</sup> Fire Detection and Alarm Systems, as reserved and supplemented

<sup>&</sup>lt;sup>2</sup> NFPA 1, 1997 edition, as reserved and supplemented

Safety Code Board of Appeal & Review. Any building, that is not a SAB/CO<sup>3</sup> place of assembly [with an occupancy of greater than one hundred fifty (150)], and is required to be equipped with a fire alarm system pursuant to the Rhode Island Uniform Fire Code, shall be so equipped on or before July 1, 2005.

# (Add) 13.8.7.2

Whenever or wherever any fire alarm system is required for compliance with the provisions of this Code, such fire alarm system shall thereafter be continuously maintained in accordance with all applicable provisions of this Code.

#### (Add) 13.8.7.3

No provisions of this chapter shall be construed so as to permit the reduction, alteration or removal of any existing fire alarm system installed under prior codes that decreases the level of life safety in any existing protected occupancy.

# (Add) 13.8.7.4

Equipment constructed and installed in conformity with this Code shall be listed for the purpose for which it is used. Fire alarm system components shall be installed in accordance with the manufacturers' installation instructions.

# (Add) 13.8.7.5

All fire detection devices that receive their power from the initiating device circuit, signaling line circuit or the notification appliance circuit of a fire alarm control unit shall be listed for use with the control unit.

#### (Add) 13.8.7.6

Where installed, detection that is not required by an applicable section of this Code, whether total, partial or selective coverage, shall conform to the requirements of this Code.

#### (Add) 13.8.8

Whenever a fire alarm system in a protected building is activated, all occupants shall evacuate the building unless specifically authorized to remain in the building by the fire department official in charge of the scene. In the case of a fire alarm activation in a high-rise building, occupants shall evacuate the area(s) where the evacuation signals are sounding or as directed by the fire department official in charge of the scene. *See also chapter 10.5*.

#### (Add) 13.8.8.1

In any building in which a fire alarm system is installed, the AHJ shall have the authority to require a key access box containing all keys to the building where fire alarm protection is provided, in accordance with § 10.12.1. Such key access box shall be compatible with the access system in use in the particular jurisdiction where the building is located. In addition, a key to the fire alarm control unit shall be provided and kept in the key access box.

# (Add) 13.8.9

Occupancies Requiring Fire Alarm Systems

<sup>&</sup>lt;sup>3</sup> See § 13.8.9.1.3.1

# (Add) 13.8.9.1

Assembly

# (Add) 13.8.9.1.1

An occupancy (1) used for a gathering of fifty (50) or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load.

# (Add) 13.8.9.1.2

Assembly occupancies include the following:

Armories Libraries

Assembly Halls Mortuary Chapels
Auditoriums Motion picture theaters

Bowling lanes Museums

Club rooms Passenger stations and terminals
College and university of air, surface, underground
classrooms, 50 ground, and marine public
persons and over transportation facilities

Conference rooms Places of religious worship

Courtrooms Pool rooms
Dance halls Recreation piers

Drinking establishments Restaurants (50 persons and over<sup>4</sup>)

Exhibition halls Skating rinks

Gymnasiums Theaters

#### (Add) 13.8.9.1.3

For the purposes of § 13.8.9.1, a "Class A" place of assembly is defined as having a capacity of one thousand one (1,001) persons or more; a "Class B" place of assembly is defined as having a capacity of three hundred one (301) to one thousand (1,000) persons; and, a "Class C" place of assembly is defined as having a capacity of fifty (50) to three hundred (300) persons.

# (Add) 13.8.9.1.3.1

A "special amusement building concentrated occupancy [SAB/CO] place of assembly" shall mean a Class A, B or C place of assembly with a maximum occupancy calculated on the basis of less than fifteen square feet (15 sq. ft.) per person and for which there is either a license issued pursuant to R.I.G.L. Chapter 3-7<sup>5</sup> or there is entertainment or there are both a liquor license and entertainment.<sup>6</sup>

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<sup>&</sup>lt;sup>4</sup> Restaurants with a capacity of 49 or less shall be classified as mercantile.

<sup>&</sup>lt;sup>5</sup> Alcoholic Beverages – Retail Licenses

<sup>&</sup>lt;sup>6</sup> R.I.G.L. § 23-28.1-5(95)

#### (Add) 13.8.9.1.4

Occupancy of any room or space for assembly purposes by fewer than fifty (50) persons in a building or other occupancy and incidental to such other occupancy shall be classified as part of the other occupancy and shall be subject to the provisions applicable thereto.

# (Add) 13.8.9.1.5

FIRE ALARM SYSTEM REQUIREMENTS (All Assembly Occupancies Except Theaters)

#### (Add) 13.8.9.1.5.1

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in all "Class C" places of assembly.

#### (Add) 13.8.9.1.5.2

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in all "Class A" and "Class B" places of assembly.

#### (Add) 13.8.9.1.5.2.1

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in all "Class A, Class B and Class C (with an occupancy of one hundred fifty (150) or greater) SAB/CO" places of assembly, by July 1, 2004 <sup>7</sup>

# (Add) 13.8.9.1.5.3

In addition to the locations prescribed in § 13.8.10 of this chapter, a manual fire alarm box shall be installed on every stage, near any fixed lighting control panel and in any projection booth.

#### (Add) 13.8.9.1.5.3.1

Manual fire alarm boxes, with the approval of the AHJ, may be omitted from required exits and installed in such supervised locations as bar areas, hostess stands or other areas attended by permanent staff.

#### (Add) 13.8.9.1.5.4

A combination rate of rise and one hundred thirty-five degrees (135°) to one hundred forty degrees (140°) F. fixed temperature heat detector shall be installed above all stage areas, below all accessible stage areas and in every projection booth.

#### (Add) 13.8.9.1.5.5

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

#### (Add) 13.8.9.1.5.6

Upon the activation of any fire alarm system in any SAB/CO place of assembly, the notification appliances throughout the facility shall activate and the fire alarm system shall be interconnected with the building systems so that all emergency lights or other appropriate lighting shall activate and that all other conflicting sounds and visuals shall cease. This provision shall take effect on

<sup>&</sup>lt;sup>7</sup> R.I.G.L. § 23-28.6-22(a)

or before February 20,  $2004^8$  where there is an existing fire alarm system and on or before July 1, 2004 for new fire alarm systems.<sup>9</sup>

# (Add) 13.8.9.1.6

Fire Alarm System Requirements (Theaters Only)

# (Add) 13.8.9.1.6.1

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every theater.

# (Add) 13.8.9.1.6.2

In addition to the locations prescribed in § 13.8.10 of this chapter, a manual fire alarm box shall be installed on every stage, near any fixed lighting control panel, and in every projection booth.

# (Add) 13.8.9.1.6.3

Manual fire alarm boxes, with the approval of the AHJ, may be omitted from required exits and installed in such supervised locations as the ticket booth or the refreshment stand.

# (Add) 13.8.9.1.6.4

Notification appliances shall be installed where required by the AHJ. A complete fire alarm/voice communication system with an automatic voice evacuation message is required. The activation of the fire alarm system shall automatically interrupt all theater audio systems and automatically raise the house lights. In addition, if the theater is classified as a SAB/CO, all emergency lights or other appropriate lighting shall activate whenever the fire alarm system is activated, on or before February 20, 2004. 10

#### (Add) 13.8.9.1.6.5

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

# (Add) 13.8.9.2

**EDUCATIONAL** 

#### (Add) 13.8.9.2.1

An occupancy used for educational purposes through the twelfth (12<sup>th</sup>) grade by six (6) or more persons for four (4) or more hours per day or more than twelve (12) hours per week.

#### (Add) 13.8.9.2.2

Educational occupancies include the following:

Academies Nursery schools

Kindergartens Schools

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<sup>&</sup>lt;sup>8</sup> R.I.G.L. § 23-28.6-22(c)

<sup>&</sup>lt;sup>9</sup> Board FI dated 10/7/03

<sup>&</sup>lt;sup>10</sup> Id.

#### (Add) 13.8.9.2.3

Other occupancies associated with educational institutions shall be in accordance with the appropriate sections of this chapter. In cases where instruction is incidental to some other occupancy, the section of this chapter governing such other occupancy shall apply.

# (Add) 13.8.9.2.4

FIRE ALARM SYSTEM REQUIREMENTS

### (Add) 13.8.9.2.4.1

A total (complete) coverage fire alarm system as is defined in *NFPA 72* § 5.5.2.1 - *Initiating Devices - Detector Coverage* and as prescribed in § 13.8.10.4.2 of this chapter shall be installed in all educational occupancies.

# (Add) 13.8.9.2.4.2

In cases where instruction is incidental to some other occupancy, the section of these regulations governing the other occupancy shall apply. Sunday schools or church schools that are not used for daily classes throughout the week shall comply with that section of this chapter dealing with places of public assembly.

# (Add) 13.8.9.2.4.3

Notification appliances shall be in accordance with §§ 13.8.10.5.3 & 13.8.10.5.3.1.

# (Add) 13.8.9.2.4.4

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

#### (Add) 13.8.9.3

HEALTH CARE

# (Add) 13.8.9.3.1

An occupancy used for purposes of medical or other treatment or care of four (4) or more persons where such occupants are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupants' control.

#### (Add) 13.8.9.3.2

Health care occupancies include the following:

Hospitals Nursing homes

Limited care facilities Ambulatory health care centers

# (Add) 13.8.9.3.3

Fire Alarm System Requirements

#### (Add) 13.8.9.3.3.1

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in all health care facilities.

#### (Add) 13.8.9.3.3.2

Provisions for the automatic and/or manual silencing of audible notification appliances may be installed if approved in writing by the AHJ. If automatic silencing of the audible notification appliances is permitted by the AHJ, the notification appliances shall sound for at least five (5) minutes before being silenced while the visible appliances remain energized. If manual silencing of the audible notification appliances is permitted by the AHJ, it shall be key-operated, located within a locked cabinet or otherwise arranged to provide suitable protection against unauthorized use. Once notification appliances are silenced, a visual zone alarm signal shall be activated until such time as the alarm condition has been cleared. Any subsequent alarm condition shall cause the notification appliances to resound. [NFPA 72 § 4.4.3.7].

# (Add) 13.8.9.3.3.2.1

Chimes, bells, speakers or other distinctive notification appliances may be utilized instead of the horn/strobe type with the approval of the AHJ. In critical area such as operating rooms, intensive care units and emergency departments, the AHJ may permit elimination of audible, and in some cases visible signaling altogether.

# (Add) 13.8.9.3.3.3

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

# (Add) 13.8.9.4

**Detention and Correctional** 

# (Add) 13.8.9.4.1

An occupancy used to house four (4) or more individuals under varied degrees of restraint or security where such occupants are mostly incapable of self-preservation because of security measures not under the occupants' control.

#### (Add) 13.8.9.4.2

Detention and correctional occupancies include the following:

Adult and juvenile substance Adult local detention facilities Juvenile community residential

Adult and juvenile work camps centers

Adult community residential Juvenile detention facilities centers Juvenile training schools

Adult correctional institutions

#### (Add) 13.8.9.4.3

Other uses within detention and correctional facilities, such as gymnasiums or industries, shall be in accordance with the appropriate section of this chapter.

#### (Add) 13.8.9.4.4

FIRE ALARM REQUIREMENTS

# (Add) 13.8.9.4.4.1

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in all detention and correctional facilities.

#### (Add) 13.8.9.4.4.2

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

# (Add) 13.8.9.4.4.3

Provisions for the automatic and/or manual silencing of audible notification appliances may be installed if approved in writing by the AHJ. If automatic silencing of the audible notification appliances is permitted by the AHJ, the notification appliances shall sound for at least five (5) minutes before being silenced while the visible appliances remain energized. If manual silencing of the audible notification appliances is permitted by the AHJ, it shall be key-operated, located within a locked cabinet or otherwise arranged to provide suitable protection against unauthorized use. Once notification appliances are silenced, a visual zone alarm signal shall be activated until such time as the alarm condition has been cleared. Any subsequent alarm condition shall cause the notification appliances to resound. [NFPA 72 § 4.4.3.7]

# (Add) 13.8.9.4.4.4

Chimes, bells, speakers or other distinctive notification appliances may be utilized instead of the horn/strobe type with the approval of the AHJ. In critical area such as cell blocks and where the occupants are not capable of self-evacuation, the AHJ may permit elimination of audible, and in some cases visible signaling altogether.

# (Add) 13.8.9.5

RESIDENTIAL

#### (Add) 13.8.9.5.1

Residential occupancies are those occupancies in which sleeping accommodations are provided for normal residential purposes and include all buildings designed to provide sleeping accommodations. EXCEPTION: Those occupancies classified under health care or detention and correctional.

# (Add) 13.8.9.5.2

Residential occupancies shall be treated separately according to the following usage groups:

#### (Add) 13.8.9.5.3

Dormitories, Hotels & motels

# (Add) 13.8.9.5.3.1

A dormitory is a building or a space in a building in which group sleeping accommodations are provided for more than sixteen (16) persons who are not members of the same family in one room or a series of closely associated rooms under joint occupancy and single management, with or without meals, but without individual cooking facilities.

# (Add) 13.8.9.5.3.2

A hotel or motel is a building or groups of buildings under the same management in which there are sleeping accommodations are provided for more than sixteen (16) persons and primarily used by transients for lodging with or without meals.

# (Add) 13.8.9.5.3.3

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every dormitory, hotel or motel.

# (Add)13.8.9.5.3.4

IN ADDITION, a visual alarm signal shall be installed in guest rooms specifically designed for the handicapped. The visual alarm signal shall comply with § 13.8.10.5.

# (Add) 13.8.9.5.3.5

A combination rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) F. fixed temperature heat detector shall be installed in every sleeping room. EXCEPTION: The heat detector may be omitted from sprinklered sleeping rooms.

# (Add) 13.8.9.5.3.6

A single station AC smoke alarm with battery back-up shall be installed in every sleeping room.

#### (Add) 13.8.9.5.3.7

EXCEPTION: Buildings no more than two (2) stories high where each guest room has a direct exit to the outside of the building shall have a fire alarm system as prescribed in § 13.8.10.4.1. In ADDITION: A single station AC smoke alarm with battery back-up shall be installed in every sleeping room.

#### (Add) 13.8.9.5.3.8

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

# (Add) 13.8.9.5.3.9

In addition, every hotel or dormitory shall be provided with either hardwired or wireless carbon monoxide detectors installed in accordance with *NFPA* 720<sup>11</sup> in every guest room and every living area and sleeping room within a guest suite.

#### (Add) 13.8.9.5.3.10

Any hotel or dormitory, not previously required to install such detectors, shall have the above detectors installed and approved on or before July 1, 2005.

# (Add) 13.8.9.5.4

**Apartment Buildings** 

<sup>&</sup>lt;sup>11</sup> NFPA 720, *Recommended Practice for the Installation of Household Carbon Monoxide (CO) Warning Equipment*, 2003 Edition

# (Add) 13.8.9.5.4.1

A building containing four (4) or more dwelling units with independent cooking and bathroom facilities.

### (Add) 13.8.9.5.4.1.1

For three (3) family apartment buildings, see § 13.8.9.5.6.

# (Add) 13.8.9.5.4.1.2

Townhouse units are considered to be an apartment building if there are four or more units in the building. EXCEPTION: Should the units be separated by walls of sufficient fire resistance and structural integrity to be considered as separate buildings<sup>12</sup>, then only the requirements of §§ 13.8.9.5.6.2 through 13.8.9.5.6.4 shall apply. [RILSC<sup>13</sup> § A-3.3.27.3]

# (Add) 13.8.9.5.4.2

Every apartment building shall have a fire alarm system installed as follows:

#### (Add) 13.8.9.5.4.2.1

Buildings containing more than three (3) and less than eight (8) dwelling units shall have a fire alarm system as prescribed in § 13.8.10.4.1.

# (Add) 13.8.9.5.4.2.2

Buildings containing eight (8) or more dwelling units shall have a fire alarm system as prescribed in § 13.8.10.4.2.

# (Add) 13.8.9.5.4.2.3

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

#### (Add) 13.8.9.5.4.3

IN ADDITION: All dwelling units in new apartment buildings shall have smoke detection systems as described in *NFPA 72* § 11.5.3 and all dwelling units in existing apartment buildings shall have smoke detection systems as described in *NFPA 72* § 11.5.4 — *Single- and Multiple-Station Alarms and Household Fire Alarm Systems*.

# (Add) 13.8.9.5.4.4

In addition, every apartment building shall be provided with either hardwired or wireless carbon monoxide detectors installed in accordance with *NFPA* 720.

# (Add) 13.8.9.5.4.5

Any apartment building, not previously required to install such detectors, shall have the above detectors installed and approved on or before July 1, 2005.

#### (Add) 13.8.9.5.5

Lodging or Rooming Houses

<sup>12</sup> See RILSC §§ 30.3.4.1.2 & 31.3.4.1.2

<sup>&</sup>lt;sup>13</sup> RI Fire Safety Code Section 8, RI Life Safety Code

# (Add) 13.8.9.5.5.1

A building or portion thereof that does not qualify as a one-, two- or three-family dwelling, that provides sleeping accommodations for a total of sixteen (16) or fewer people on a transient or permanent basis, without personal care services, with or without meals, but without separate cooking facilities for individual occupants.

# (Add) 13.8.9.5.5.2

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in every lodging or rooming house.

#### (Add) 13.8.9.5.5.3

IN ADDITION: A single station AC smoke alarm with battery back-up shall be installed in every sleeping room.

#### (Add) 13.8.9.5.5.4

In addition, every lodging or rooming house shall be provided with either hardwired or wireless carbon monoxide detectors installed in accordance with *NFPA* 720.

# (Add) 13.8.9.5.5.5

Any lodging or rooming house, not previously required to install such detectors, shall have the above detectors installed and approved on or before July 1, 2005.

# (Add) 13.8.9.5.6

One-, Two- and Three Family Dwellings

#### (Add) 13.8.9.5.6.1

One-, two- and three-family dwellings include buildings containing not more than three dwelling units in which each dwelling unit is occupied by members of a single family with not more than three (3) outsiders, if any, accommodated in rented rooms.

# (Add) 13.8.9.5.6.1.1

A three family apartment building is a building or portion thereof containing three dwelling units with independent cooking and bathroom facilities.

#### (Add) 13.8.9.5.6.2

A fire and carbon monoxide detection system as prescribed in RILSC Chapters 24 & 25 and NFPA 720 shall be installed in all one-, two- and three-family dwellings and all three family apartment buildings.

# (Add) 13.8.9.5.6.3

In addition, an interconnected smoke detector(s) shall be installed in all integral or attached garages in dwelling units permitted or constructed after February 20, 2004.

#### (Add) 13.8.9.5.6.3.1

EXCEPTION: Rate of rise heat detectors, fixed temperature heat detectors or other type detectors listed for these applications may be installed in situations where physical, environmental or other conditions would render smoke detectors impractical.

# (Add) 13.8.9.5.6.4

Further, interconnected hard-wired or supervised interconnected UL ® listed wireless smoke and carbon monoxide [CO] detectors shall be installed in all three (3) family dwellings and three (3) family apartment buildings on or before July 1, 2008. 14

#### (Add) 13.8.9.5.7

Residential Boarding and Care Facilities

# (Add) 13.8.9.5.7.1

A building or portion thereof that is used for lodging and boarding of four (4) or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services.

# (Add) 13.8.9.5.7.2

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in every board and care facility housing less than seventeen (17) occupants.

# (Add) 13.8.9.5.7.3

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every board and care facility housing seventeen (17) or more occupants.

#### (Add) 13.8.9.5.7.4

IN ADDITION, a visual alarm signal shall be installed in guest rooms specifically designed for the handicapped. The visual alarm signal shall comply with § 13.8.10.5.

#### (Add) 13.8.9.5.7.5

A combination rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) F. fixed temperature heat detector shall be installed in every sleeping room.

EXCEPTION: The heat detector may be omitted from sprinklered sleeping rooms.

#### (Add) 13.8.9.5.7.6

A single station AC smoke alarm with battery back-up shall be installed in every sleeping room.

#### (Add) 13.8.9.5.7.7

EXCEPTION: Buildings no more than two (2) stories high where each guest room has a direct exit to the outside of the building shall have a fire alarm system as prescribed in § 13.8.10.4.1. IN ADDITION: A single station AC smoke alarm with battery back-up shall be installed in every sleeping room.

<sup>&</sup>lt;sup>14</sup> R.I.G.L. § 23-28.1-2(b)(2)

## (Add) 13.8.9.5.7.8

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

## (Add) 13.8.9.5.7.9

In addition, every residential board and care facility shall be provided with either hardwired or wireless carbon monoxide detectors installed in accordance with *NFPA* 720.

## (Add) 13.8.9.5.7.10

Any residential board and care facility, not previously required to install such detectors, shall have the above detectors installed and approved on or before July 1, 2005.

## (Add) 13.8.9.5.8

**Emergency Shelter Occupancies** 

## (Add) 13.8.9.5.8.1

An occupancy or portion thereof used on a temporary basis to provide sleeping accommodations for transient individuals who have no other shelter arrangements during periods of severe lifethreatening weather.

## (Add) 13.8.9.5.8.2

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in every emergency shelter occupancy housing sixteen (16) or fewer residents.

## (Add) 13.8.9.5.8.2

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every emergency shelter occupancy housing more than sixteen (16) residents.

#### (Add) 13.8.9.5.8.3

A combination rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) F. fixed temperature heat detector shall be installed in every sleeping room.

EXCEPTION: The heat detector may be omitted from sprinklered sleeping rooms.

#### (Add) 13.8.9.5.8.4

A single station AC smoke alarm with battery back-up shall be installed in every sleeping room.

## (Add) 13.8.9.5.8.5

In addition, every emergency shelter occupancy shall be provided with either hardwired or wireless carbon monoxide detectors installed in accordance with *NFPA* 720.

## (Add) 13.8.9.6

**MERCANTILE** 

#### (Add) 13.8.9.6.1

An occupancy used for the display and sale of merchandise.

## (Add) 13.8.9.6.2

Mercantile occupancies include the following:

Auction rooms Shopping centers
Department stores Supermarkets

Drugstores Restaurants (< 50 occupants)

# (Add) 13.8.9.6.3

FIRE ALARM REQUIREMENTS

#### (Add) 13.8.9.6.3.1

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in all mercantile buildings having more than six hundred square feet (600 sq. ft.), or more than one story above grade, or having commercial cooking facilities.

## (Add) 13.8.9.6.3.2

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every mercantile building having a total floor area of more than ten thousand square feet (10,000 sq. ft.) on any one floor or extending three (3) stories or more above grade level.

## (Add) 13.8.9.6.3.3

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

## (Add) 13.8.9.7

**BUSINESS** 

#### (Add) 13.8.9.7.1

An occupancy used for account and record keeping or the transaction of business other than mercantile.

#### (Add) 13.8.9.7.2

Business occupancies include the following:

Air traffic control towers (ATCTs)

City/Town Halls

College and university instructional
buildings, classrooms under 50
persons and instructional
laboratories

Courthouses
Dentist's offices
General offices
Outpatient clinics,
ambulatory

#### (Add) 13.8.9.7.3

FIRE ALARM REQUIREMENTS

## (Add) 13.8.9.7.3.1

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in all business buildings having more than one thousand square feet (1,000 sq. ft.), or more than one story above grade, or having commercial cooking facilities.

## (Add) 13.8.9.7.3.2

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every business building having a total floor area of more than ten thousand square feet (10,000 sq. ft.) on any one floor or extending three (3) stories or more above grade level.

#### (Add) 13.8.9.7.3.3

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

## (Add) 13.8.9.8

**INDUSTRIAL** 

#### (Add) 13.8.9.8.1

An occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted.

## (Add) 13.8.9.8.2

Industrial occupancies include the following:

Dry cleaning plants

Factories of all kinds

Food Processing plants

Laundries

Power plants

Pumping stations

Gas plants Refineries Hangars (for servicing Sawmills

or maintenance) Telephone exchange facilities

#### (Add) 13.8.9.8.3

FIRE ALARM REQUIREMENTS

## (Add) 13.8.9.8.3.1

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in all industrial buildings having more than two thousand five hundred square feet (2,500 sq. ft.), or more than one story above grade, or having commercial cooking facilities.

#### (Add) 13.8.9.8.3.2

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every industrial building having a total floor area of more than ten thousand square feet (10,000 sq. ft.) on any one floor or extending three (3) stories or more above grade level.

#### (Add) 13.8.9.8.3.3

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

## (Add) 13.8.9.9

**STORAGE** 

## (Add) 13.8.9.9.1

An occupancy used primarily for the storage or sheltering of goods, merchandise, products, vehicles or animals.

## (Add) 13.8.9.9.2

Storage occupancies include the following:

Barns Hangars (for storage only)

Bulk oil storage Parking structures

Cold storage Stables

Freight terminals

Truck and marine terminals

Grain elevators Warehouses

#### (Add) 13.8.9.9.3

FIRE ALARM REQUIREMENTS

## (Add) 13.8.9.9.3.1

A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in all storage buildings having more than two thousand square feet (2,000 sq. ft.), or more than one story above grade, or having commercial cooking facilities.

## (Add) 13.8.9.9.3.2

A fire alarm system as prescribed in § 13.8.10.4.2 shall be installed in every storage building having a total floor area of more than ten thousand square feet (10,000 sq. ft.) on any one floor or extending three (3) stories or more above grade level.

#### (Add) 13.8.9.9.3.3

Buildings classified as high rise shall have a fire alarm system as prescribed in § 13.8.10.4.3.

#### (Add) 13.8.9.9.3.4

EXCEPTION: Fire alarm systems shall not be required in non-combustible storage buildings with contents classified as low hazard.

#### (Add) 13.8.9.10

DAY CARE

## (Add) 13.8.9.10.1

An occupancy in which four (4) or more clients receive care, maintenance and supervision by other than their relatives or legal guardians, for less than twenty-four (24) hours per day.

# (Add) 13.8.9.10.2

Day care occupancies include the following:

Child day-care occupancies
Adult day-care occupancies,
Except where part of a
health care occupancy
Day-care homes (4 to 12 clients)

Kindergarten classes that are incidental to a child day-care occupancy

## (Add) 13.8.9.10.3

In cases where care is incidental to some other occupancy, the section of this chapter governing such other occupancy shall apply.

## (Add) 13.8.9.10.4

FIRE ALARM SYSTEM REQUIREMENTS

## (Add) 13.8.9.10.4.1

A total (complete) coverage fire alarm system as defined in *NFPA 72* § 5.5.2.1 — *Initiating Devices* – *Detector Coverage* and as prescribed in § 13.8.10.4.2 of this chapter shall be installed in all day care occupancies.

# (Add) 13.8.9.10.4.2

EXCEPTION: A fire alarm system as prescribed in § 13.8.10.4.1 shall be installed in all day care occupancies used for the gathering of nineteen (19) or less clients <u>and</u> under three thousand square feet (3,000 sq. ft.) <u>and</u> located on a ground floor.

## (Add) 13.8.9.10.4.3

In addition, every child day care occupancy shall be provided with either hardwired or wireless carbon monoxide detectors installed in accordance with *NFPA* 720.

# (Add) 13.8.9.10.4.4

Any child day care occupancy, not previously required to install such detectors, shall have the above detectors installed and approved on or before July 1, 2005.

#### (Add) 13.8.9.11

Mixed Occupancies

#### (Add) 13.8.9.11.1

When two or more classes of occupancy occur in the same building or structure and are intermingled so that separate safeguards are impractical, means of egress facilities, construction, protection and other safeguards shall comply with the most restrictive life safety requirements of the occupancies involved.

#### (Add) 13.8.9.11.1.2

EXCEPTION: An occupancy incidental to operations in another occupancy shall be permitted to be considered as part of the predominant occupancy and shall be subject to the provisions of this chapter that apply to the predominant occupancy.

#### (Add) 13.8.9.12

#### **HAZARDOUS CONDITIONS**

## (Add) 13.8.9.12.1

In a building where a fire alarm system is exempted due to the minimum square footage provisions of §§ 13.8.9.6.3.1, 13.8.9.7.3.1, 13.8.9.8.3.1 or 13.8.9.9.3.1 or by § 13.8.9.9.3.4, a fire alarm system as prescribed in § 13.8.10.4.1 may be required by the AHJ where it is proven that life safety of the occupants is compromised due to the proximity of exposures, limitations to fire department vehicle access or other such hazardous conditions. See also § 13.1.11.

#### (Add) 13.8.10

ADMINISTRATIVE PROVISIONS

## (Add) 13.8.10.1

**APPLICABILITY** 

## (Add) 13.8.10.1.1

This chapter shall apply to all existing and new buildings and to all buildings with an existing fire alarm system where there is a change of use or occupancy to one that will require a new fire alarm system.

# (Add) 13.8.10.1.2

Existing buildings shall be in compliance with section 13.7.

## (Add) 13.8.10.2

**Authority Having Jurisdiction** 

# (Add) 13.8.10.2.1

The authority having jurisdiction [AHJ], for the purpose of this chapter only, shall be the state fire marshal or his or her designee and those chiefs of fire departments, superintendents of fire alarms, or directors of communication certified by the state fire marshal as prescribed by R.I.G.L. § 23-28.2-6.

## (Add)13.8.10.3

**APPROVAL** 

#### (Add) 13.8.10.3.1

Before installation or alteration of any fire alarm system required by this chapter commences and regardless of what any other authority may require, construction documents and drawings showing complete system design details, inclusive of, but not limited to, a description of system operations and a description of the components of the system and their location within the protected building shall be submitted in writing to the AHJ and shall fully comply with the contents of this chapter.

#### (Add) 13.8.10.4

Types of Systems

## (Add) 13.8.10.4.1

Local Systems

#### (Add) 13.8.10.4.1.1

A connection to a municipal fire alarm system is not required for this type of system. A local system, for the purpose of this chapter is defined as consisting of a power limited fire alarm control unit listed by the UNDERWRITERS LABORATORIES [hereinafter UL] or approved by FM GLOBAL [hereinafter FMG]; manual fire alarm boxes marked "Local Alarm Not Connected To Fire Dept." located within five (5) feet of each required means of egress on each floor; at least one automatic fixed temperature heat detector with a rating of one hundred ninety degree (190°) to two hundred degree (200°) F. installed in kitchens, boiler rooms, and accessible attics; at least one combination rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) F. fixed temperature heat detectors in all utility, mechanical, storage, and maintenance rooms, all integral or attached garages and all elevator shafts; and smoke detectors in all common corridors, stairwells at each floor, all elevator machine rooms and all elevator landings. Combination rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) F. fixed temperature heat detectors shall be installed in spaces of twenty-four inches (24") or more above suspended ceilings and in accordance with NFPA 72 — Initiating Devices, and shall be on a separate zone from the area below the ceiling. Additional detectors shall be required in areas proven essential to life safety by the AHJ. A minimum of twenty-four (24) hours of battery standby power is required for a local system. Class "B" wiring using an end of line resistor installed on terminal strips in the fire alarm control unit for both initiating and notification appliance circuits shall be used for all local systems. Class "A" wiring shall be required if the fire alarm control unit is so configured. All detectors, notification appliances and manual fire alarm boxes shall be mounted on approved junction boxes. Installation of this system shall be in compliance with NFPA 72 and §§ 13.8.10.5 and 13.8.10.6 of this chapter. The activation of any manual fire alarm box or the automatic activation of any detector or suppression system switch shall activate all notification appliances, de-energize all door holders, and initiate elevator recall. Audible and visible notification appliances shall be installed in accordance with the requirements of NFPA 72 — Notification Appliances for Fire Alarm Systems.

## (Add) 13.8.10.4.1.1.1

In addition, a weatherproof horn/strobe shall be installed on the exterior of each building at a location approved by the AHJ.

## (Add) 13.8.10.4.1.2

EXCEPTION: A municipally connected fire alarm system meeting the requirements of § 13.8.10.4.2 may be installed at the option of the building owner.

## (Add) 13.8.10.4.2

Municipally Connected Systems.

## (Add) 13.8.10.4.2.1

Municipally connected systems shall comply with § 13.8.10.7 of this chapter. A municipally connected system for the purpose of this chapter is defined as a system consisting of a power limited fire alarm control unit listed by UL or approved by FMG, where the manual activation of any fire alarm box or the automatic activation of any heat detector, smoke detector, sprinkler flow switch, other extinguishing system switch or standpipe flow switch shall activate all notification appliances within the building, de-energize door holders causing all fire/smoke doors that are allowed to be held open in the entire building to close, summon the local fire department, shut down any applicable heating, ventilating and air conditioning [HVAC] systems and initiate elevator recall. Operating power failure, low battery voltage, an open or grounded wire in any of the initiating device circuits [IDC], signaling line circuits [SLC], notification appliance circuits [NAC], the circuit to the municipal master box or transmitter, or the leased line to the remote station shall activate audible and visual trouble signals on the system control unit and annunciator, that cannot be reset until the circuits are restored to normal. All circuits and components of a fire alarm system shall be monitored for integrity as required by NFPA 72 — Fundamentals of Fire Alarm Systems. The audible trouble signal may be silenced with the trouble signal silencing switch but the lamp shall not be extinguished until the circuits are normal. Restoring the circuits to normal after the silencing switch has been operated shall cause the lamp to extinguish and the audible signal to resound until the silencing switch is restored to normal. In the event of a commercial power outage, the entire system shall immediately transfer to a standby battery source of power and be capable of supplying the entire system for sixty (60) hours. All initiating device circuits [IDC], signaling line circuits [SLC], and notification appliance circuits [NAC] shall be wired in a Class "A" fashion as defined in NFPA 72 — Protected Premises Fire Alarm Systems.

#### (Add) 13.8.10.4.2.2

Combination rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) F. fixed temperature heat detectors shall be located in all general storage rooms, all utility, electrical, and mechanical equipment rooms, all janitor closets, trash collection rooms, maintenance shops, locker rooms, classrooms, projection booths, above stage areas, below any accessible stage areas, all integral or attached garages and all elevator shafts. Combination rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) F. fixed temperature heat detectors shall be installed in spaces of twenty-four inches (24") or more above suspended ceilings and installed in accordance with NFPA 72 — Initiating Devices, and shall be on a separate zone from the area below the ceiling.

#### (Add) 13.8.10.4.2.2.1

EXCEPTION: Rate anticipation detectors, beam detectors or other type detectors listed for these applications may be installed in situations where physical, environmental or other conditions would render other detectors impractical.

#### (Add) 13.8.10.4.2.3

Automatic fixed temperature heat detectors with a rating of one hundred ninety degrees (190°) to two hundred degrees (200°) F. shall be installed in all boiler rooms, accessible attics, and kitchens or where permanent cooking or heating equipment is located.

## (Add) 13.8.10.4.2.3.1

EXCEPTION: Kitchens adjacent to all sleeping rooms separated by any wall shall be protected by a combination rate of rise and one hundred thirty-five degrees (135°) to one hundred forty degrees (140°) F. fixed temperature heat detector in lieu of a fixed temperature heat detector.

# (Add) 13.8.10.4.2.4

Smoke detectors shall be installed in all common corridors, in stairwells at each floor level, in all elevator machine rooms and all elevator landings.

## (Add) 13.8.10.4.2.5

Manual fire alarms boxes shall be distributed throughout the protected building so that they are conspicuous, unobstructed and readily accessible. Manual fire alarm boxes shall be located within five feet (5') of each required means of egress on each floor. Manual fire alarm boxes shall be mounted on both sides of grouped openings over forty feet (40') in width, and within five feet (5') of each side of the opening. These boxes shall <u>not</u> be marked "local". [NFPA 72 § 5.12.7]

# (Add) 13.8.10.4.2.5.1

Additional boxes shall be provided on each floor or in each fire area to obtain a maximum horizontal travel distance of two hundred feet (200') to the nearest box unless otherwise specified in occupancy sections of this code. [NFPA 72 § 5.12.8]

## (Add) 13.8.10.4.2.6

Additional detectors shall be required in areas proven essential to life safety by the AHJ, and shall be in compliance with §§ 13.8.10.5 and 13.8.10.6.

#### (Add) 13.8.10.4.3

High Rise Systems

#### (Add) 13.8.10.4.3.1

A high rise building is defined as a building more than seventy-five feet (75') in height measured from the lowest level of fire department vehicle access to the highest occupiable story. An occupiable story is a story occupied by people on a regular basis. Stories used exclusively for mechanical equipment rooms, elevator penthouses and similar spaces are not occupiable stories.

## (Add) 13.8.10.4.3.2

A high rise system for the purpose of this chapter is defined as a municipally connected fire alarm system consisting of a power limited fire alarm control unit listed by UL and/or approved by FMG, with voice communication and a two-way fire department communication system. All circuits for a high rise fire alarm system shall be installed in a Class "A" fashion as described in *NFPA 72*. Fire Alarm/Voice Communication Systems shall be provided in all high rise buildings regardless of the occupancy and shall operate as follows:

## (Add) 13.8.10.4.3.3

The operation of any manual fire alarm box or the automatic activation of any heat detector, smoke detector, sprinkler flow switch, standpipe flow switch or other extinguishing system switch shall:

## (Add) 13.8.10.4.3.3.1

Automatically sound a distinctive audible signal and activate the visible notification appliances on the floor where the alarm originated, one floor above and one floor below the floor where the alarm originated;

#### (Add) 13.8.10.4.3.3.2

Automatically notify the local fire department;

## (Add) 13.8.10.4.3.3.3

Visually indicate the location of the origin of the alarm at the fire command center within the building;

# (Add) 13.8.10.4.3.3.4

Interlock with the heating, ventilating and air conditioning [HVAC] control systems to provide for automatic fan shut-down as required in § 13.8.10.5.10;

# (Add) 13.8.10.4.3.3.5

Interlock with all stairwell pressurization, smoke exhaust and smoke control systems to control HVAC operations as required in § 13.8.10.5.10. Stairwell pressurization, smoke exhaust and smoke control systems shall not be activated by the activation of manual fire alarm boxes;

## (Add) 13.8.10.4.3.3.6

Interlock with all elevators to provide elevator recall in accordance with NFPA 72 § 6.15.3; and,

#### (Add) 13.8.10.4.3.3.7

De-energize door holders causing all fire/smoke doors which are allowed to be held open in the entire building to close.

## (Add) 13.8.10.4.3.4

All high rise fire alarm and voice communication system equipment shall comply with all applicable UL and FMG Standards. All Fire Alarm/Voice Communication Systems shall also be provided with standby amplifiers equal to the amount of amplification required for the complete system operation. A fire command center shall be provided at the main level of access to the building at a location approved by the AHJ. This fire command center shall include, but is not limited to, fire alarm and fire detection system control unit; voice communication system control units; emergency firefighter's telephone systems; status indicators and controls for air handling systems; status indicators and controls for elevators; and other systems as may be required. Means shall be provided at the fire command center to selectively manually operate the audible notification appliances on any floor. A microphone and suitable switches shall be provided at the fire command center to selectively transmit voice communications to all public areas on every floor or fire area or groups of floors or fire areas. Voice communications shall override the

alarm signal. Means shall be provided at the fire command center to operate any exit or stairway door unlocking system. Two-way telephonic communication system shall be provided between the fire command center, every stairway floor landing, and each elevator lobby on every floor. In addition, a two-way fire emergency telephone shall be provided in every elevator car. Firefighters' two-way telephone system shall be individually zoned and supervised by floors and shall be selectable individually by floor or up to five (5) telephones in a group at the command center. This system shall be wired in a separate metallic raceway system from the fire alarm system wiring and shall meet the survivability requirements for fire alarm voice/communication circuits as required by NFPA 72. An individual telephone instrument shall be permanently installed at each telephone location and mounted in a lockable, red enclosure. Individual telephone annunciation shall be by telephone cradle switch. Speaker and telephone circuits shall also be supervised for short circuits. Manual fire alarm boxes shall be located at every stairwell on every floor and as indicated in § 13.8.10.4.2.5. Combination rate of rise and fixed temperature heat detectors rated at one hundred thirty-five degrees (135°) to one hundred forty degrees (140°) F. shall be located in accordance with § 13.8.10.4.2.2. Automatic one hundred ninety degrees (190°) to two hundred degrees (200°) F. fixed temperature heat detectors shall be installed in accordance with § 13.8.10.4.2.3. Smoke detectors shall be installed as required in all common corridors, all elevator machine rooms, all elevator landings, and on the first floor, every third floor thereafter and at the top of every stairwell. Stairwell smoke detector activation shall not cause an evacuation signal to be sounded however automatic notification of the fire department shall occur. Where there is a constantly attended location within the building, an alarm signal shall be transmitted to this location whenever a stairwell smoke detector is activated. Speakers shall be provided so as to be effectively heard above all other sounds by all occupants in every occupied space on each floor or fire area. Audibility levels and voice intelligibility levels shall be as required by NFPA 72. All circuitry to all manual fire alarm boxes, automatic heat detectors, and smoke detectors, sprinkler or standpipe flow switches, all fire communication speakers, and firefighter's and emergency telephones shall be supervised. An open or ground in any of this circuitry or a failure of any essential part of the amplifier shall activate audible and visual trouble signals at the fire command center. Standby power shall be provided as prescribed in § 13.8.10.4.2.1.

#### (Add) 13.8.10.4.3.5

EXCEPTION: A radio repeater system compatible with the local fire department's equipment may be installed instead of a two-way telephonic communication system with the written approval of the AHJ. Any equipment installed pursuant to this section shall have its operating and/or annunciation controls located at the fire command center. Standby power shall be provided for this system capable of maintaining complete operation for sixty (60) hours.

#### (Add) 13.8.10.4.4

Multiplex Systems, Addressable, Addressable-Analog Systems

#### (Add) 13.8.10.4.4.1

Active polling multiplex systems, addressable and addressable analog systems shall be permitted. Microprocessor, software or wiring failures shall indicate a trouble condition specific to the failure. Multiplexing of analog and digital signals shall be provided between the Central Processing Unit [CPU] and circuit interfaces. Transponders, Data Gathering Panels, Nodes, etc.

shall communicate with the Central Processing Unit [CPU] via a Class "A", Style 7 Signaling Line Circuits [SLC] meeting the requirements for survivability as described in NFPA 72. The Signaling Line Circuit for all other devices shall be wired Class "A". [Style 6, NFPA 72]. Signaling Line Circuits shall be protected from wire to wire short circuit faults by the use of fault isolation modules. Fault isolation modules shall be installed on all SLCs to prevent a wire to wire short circuit fault from disabling more than twenty-five (25) devices on the circuit. In no case shall the length of and area disabled by a wire to wire short circuit fault exceed two hundred feet (200') in any one direction. When a common SLC serves more than one floor of a building, fault isolation modules shall be installed to prevent a wire to wire short circuit fault on one floor from disabling the SLC on any other floor. All wiring shall be as required by the manufacturer following the color code requirements of § 13.8.10.6, and, a minimum of #16 gauge wire. All remote data gathering panels, remote fire alarm control units and devices shall derive their power from the CPU or from self-contained power supplies; the power supply shall be subject to the same primary and secondary power requirements as the main fire alarm control unit. The CPU, remote interface panels, modules, and the system devices shall be UL listed or FMG approved and cross-listed for compatibility as a system by the fire alarm control unit manufacturer. Devices using self-contained addressable modules (i.e. smoke detectors, manual fire alarm boxes, etc.) shall be UL listed or FMG approved for the desired application and shall meet all requirements of this code for such devices. Removal of any such device shall cause a trouble signal specific to the affected device and shall not affect the operation of other devices on the circuit. Devices monitored or controlled by an addressable module separate from the device shall have the location of the addressable module plainly displayed at the CPU. All addressable or addressable-analog fire alarm control units shall be programmed such that when an alarm is silenced or acknowledged, the municipal connection shall be restorable.

#### (Add) 13.8.10.4.4.2

The time delay between the activation of any initiating device and the automatic activation of local safety devices, alarm notification appliances and/or emergency voice communications and annunciation shall not exceed ten (10) seconds [NFPA 72 § 6.8.1.1].

# (Add) 13.8.10.5 EQUIPMENT

## (Add) 13.8.10.5.1

All components of the fire alarm system including, but not limited to, the control equipment, the battery(s) and charger, the annunciator, the manual fire alarm boxes, the automatic heat detectors, the smoke detectors, the sprinkler flow switches, the extinguishing system switches, the door holders, and the alarm notification appliances shall be listed by UL or approved by FMG.

#### (Add) 13.8.10.5.2

Manual fire alarm boxes shall be approved for the particular application and shall be used only for alarm signaling or emergency evacuation purposes, shall be double action, color red, key locked and shall be keyed the same as the fire alarm control unit door lock. The height of the manual fire alarm boxes shall be forty-eight inches (48") measured vertically, from the finished floor level to the activating handle or lever of the fire alarm box.

## (Add) 13.8.10.5.2.1

EXCEPTION: Key-operated manual fire alarm boxes, lockable enclosures, break-glass enclosures or other tamper-resistant devices may be installed in place of or in addition to standard manual fire alarm boxes in areas deemed prone to false alarms subject to the written approval of the AHJ.

## (Add) 13.8.10.5.3

Alarm notification appliances shall be the combination horn/strobe type, or if the horn is mounted separately, there shall be a flashing strobe located nearby. The horn and strobe distribution and installation shall be in accordance with NFPA 72 — Notification Appliances for Fire Alarm Systems. This strobe shall be distinctively marked "FIRE". Notification appliances shall be used for no other purpose and shall be of such character and so located as to be effectively heard above all other sounds by all occupants in every occupied space in the building. Where specified in occupancy sections of this code, bells or chimes may, with the approval of the AHJ, be used in lieu of horns providing that they are distinct from any other signal in the building. Approved speaker systems used for evacuation shall be at the same audio level for both speech information and alarm evacuation. Both speech information and alarm evacuation audible levels must be high enough to be heard above ambient room noises throughout the building. In bedroom areas alarm sounding levels must be at least fifteen (15) dbA above average ambient room noise levels or seventy (70) dbA, whichever is greater, measured at the pillow level. Mini horns (or speakers, if applicable) shall be installed in all sleeping areas.

## (Add) 13.8.10.5.3.1

All notification appliances installed after February 20, 2004 and used for building evacuation shall be of the distinctive three-pulse temporal fire alarm evacuation signal. EXCEPTION: This evacuation signal shall not be used where, with the approval of the AHJ, the planned action during a fire emergency is not evacuation, but rather is the relocation of occupants or their protection in place as directed by the building fire protection plan or as directed by the fire fighting personnel. *NFPA* 72 §§ 4.4.3.6 & 6.8.6.4.1.

#### (Add) 13.8.10.5.3.2

Wall-mounted notification appliances shall be mounted such that the entire strobe lens is not less than eighty inches (80") and not greater than ninety-six inches (96") above the finished floor. Ceiling-mounted appliances shall be permitted provided that they are listed for that application.

#### (Add) 13.8.10.5.3.3

The light source color shall be clear or nominal white and shall not exceed one thousand (1,000) cd (effective intensity).

#### (Add) 13.8.10.5.4

Heat detector and smoke detector spacing shall not exceed the linear maximum indicated for that particular device by an UL or FMG approved testing laboratory except as allowed by *NFPA 72*. In locations where heat detectors and/or smoke detectors are required, the type and/or temperature rating of the heat detector or smoke detector may be modified by the AHJ if, in the authority's judgment, the type or temperature setting of the unit is unsuitable due to

environmental or structural conditions unique to that location. Areas in buildings having an approved system of automatic sprinklers shall be exempt from the requirements of heat detectors. This exemption shall not apply to smoke detectors.

## (Add) 13.8.10.5.4.1

Where subject to mechanical damage, an initiating device shall be protected. A mechanical guard used to protect a smoke or heat detector shall be listed for use with the detector.

## (Add) 13.8.10.5.4.2

Unless tested and listed for recessed mounting, detectors shall not be recessed into the mounting surface.

# (Add) 13.8.10.5.5

Waterflow switches shall be provided on all sprinkler systems and standpipes installed in all buildings required by this code to have a fire alarm system. The flow switch shall activate the fire alarm system within ninety (90) seconds if any one sprinkler head activates or any standpipe is opened in accordance with NFPA 72 § 5.10.2. All flow switches shall have a retard feature to prevent false alarms due to a water surge. A flow switch shall be installed in the main riser so that any flow of water in the system will activate this device. This flow switch shall be on a separate zone and will be designated "sprinkler water flow" or "sprinkler/standpipe water flow". Flow alarm switches on sprinkler systems and wet standpipe systems shall be installed so that they cannot be disconnected from the fire alarm system by the operation of a shutoff valve. Sprinklers systems shall be zoned hydraulically as per fire alarm zones with an additional flow switch connected to each fire alarm zone. An inspector's test valve shall be installed at the end of each sprinkler zone, at the furthest point away from the riser. Any alarm originating from a sprinkler head or a standpipe connection shall provide two (2) separate indications on the system annunciator, one to indicate "sprinkler/standpipe" and one to indicate the activated zone. All standpipe connections on each floor shall be wired with flow switches. The flow switches shall alarm the zone where the standpipe connection is located.

#### (Add) 13.8.10.5.5.1

Exception: Multiplex, addressable, addressable-analog fire alarm systems shall indicate the zone using the square footage of each floor protected by the automatic sprinkler zone as allowed in  $NFPA\ 13 - 2003$  edition.

## (Add) 13.8.10.5.6

Valves on connections to water supplies, sectional control and isolation valves, and other valves in supply pipes to sprinklers and other fixed water-based fire suppression systems shall be supervised by tamper switches. The tamper switch shall activate the fire alarm system sprinkler supervisory zone signal any time the valve is in an "off-normal" condition and the water supply is shut off or interrupted in accordance with *NFPA 13* and *NFPA 72* § 6.8.5.7.

<sup>&</sup>lt;sup>15</sup> Board BV dated 10/7/03 provides that when a future required sprinkler system is to installed in a place of assembly, required heat detectors may be omitted at the time of the fire alarm system installation. Should the sprinklers not be installed for any reason, the required heat detectors would then be required.

# (Add) 13.8.10.5.7

An alarm-initiating switch shall be provided on all required manual or automatic extinguishing systems, in addition to sprinkler systems, in buildings required by this code to have a fire alarm system. This switch shall activate the building's fire alarm system any time the extinguishing system is activated and shall be on a separate zone.

## (Add) 13.8.10.5.8

A building having a required fire alarm system, which is more than twenty thousand square feet (20,000 sq. ft.) in total area or which extends to more than one floor, shall have a fire alarm annunciator to visually indicate the location of an alarm within the building located inside the main entrance of the building or in a location as approved by the AHJ. Each floor shall be separately zoned. If a floor area exceeds twenty thousand square feet (20,000 sq. ft.), additional zoning shall be provided. In no case shall the length of any zone exceed two hundred feet (200') in any direction. Fire alarm annunciator visible indicators can not be extinguished until the system is reset. Other identifying devices such as a computer printout are acceptable in lieu of an annunciator, subject to approval of the AHJ. A directory or zone map as required by the AHJ shall be provided for every zoned fire alarm system. Fire alarm annunciator location shall meet the requirements of the AHJ. If the fire alarm annunciator is a remote fire alarm control unit, it shall be key-locked and contain all system functions including a trouble light and audible trouble signal with silence switch, system reset, and system silence with resound and cover all required zones. Annunciation of alarm and trouble indications will be accomplished with the use of separate zone wiring and not with the use of multiple contact initiating devices. The fire alarm annunciation shall be by floors or locations and not by a zone number only. In the event that a building has a fire pump(s) or generator(s), provisions shall be made at the fire alarm control unit and fire alarm annunciator for visible/audible indication of generator or fire pump operation. Activation of a fire pump or generator shall not cause an alarm condition or notify the fire department. Power-off switches for any required generator or fire pump shall be monitored at the fire alarm control unit, fire alarm annunciator and at a constantly attended location within the building, if so provided.

## (Add) 13.8.10.5.8.1

In complexes consisting of multiple building clusters, a common municipal fire department connection may, at the discretion of the AHJ, be used providing a system-powered one million (1,000,000) candle power strobe light shall be installed on each building so as to be visible at the master box or a central location.

#### (Add) 13.8.10.5.9

All required fire alarm systems shall be connected to an approved power source in the building and in addition shall have automatically charged storage type battery standby power (dry cell shall not be used) of sufficient capacity to operate the entire system as required by § 13.8.10.4 for the type of system after the principal source of power has failed. The fire alarm system must be able to function and sound the notification appliances for at least five (5) minutes following the required standby period.

## (Add) 13.8.10.5.9.1

Systems utilizing an emergency generator as a source of standby power shall not be exempt from the above requirements for battery standby power.

#### (Add) 13.8.10.5.10

In all buildings having a fire alarm system, the fire alarm system shall be interconnected to the building's heating, ventilation and air conditioning [HVAC] controls so that the fan(s) supplying two thousand (2,000) cubic feet per minute (cfm) or greater capacity of any ventilating system not used for pressurization of a fire safe area or four (4) or more ceiling mounted industrial air circulation fans installed in one room shall automatically shut down any time, other than drills or when testing, that any initiating device connected to the fire alarm system is activated. If duct-type smoke detectors are installed in HVAC systems, the duct-type smoke detectors shall be connected to the fire alarm control unit to signal an audible and visual supervisory signal at the fire alarm control unit and annunciator. An alarm condition shall not occur unless specifically requested and authorized by the AHJ.

## (Add) 13.8.10.5.10.1

EXCEPTION: Where total coverage smoke detection is installed in all areas of the smoke compartment served by the return air system, installation of air duct detectors in the return air system shall not be required, provided their function is accomplished by the design of the area detection system.

## (Add) 13.8.10.5.10.2

Where installation of automatic smoke area detection is impractical due to ambient conditions, automatic heat detection shall be permitted. In areas covered by automatic sprinkler systems, automatic heat detection shall not be required.

#### (Add) 13.8.10.5.10.3

EXCEPTION: See § 13.8.10.4.3.3.5.

## (Add) 13.8.10.5.10.4

A manual override for the HVAC, stairwell pressurization, smoke venting and smoke control systems control feature shall be provided in the fire alarm control unit for drills and testing of the fire alarm system.

## (Add) 13.8.10.5.11

All required smoke and fire doors in all buildings required by this code to have a fire alarm system may be held open only if equipped with magnetic or electro-mechanical door holders installed so as to close the doors anytime the alarm system within the building is activated. Smoke detectors connected to the alarm system within the building shall be installed proximate to every smoke and fire door that is held open.

#### (Add) 13.8.10.5.12

All buildings that have a fire alarm system required by this Code that require fire drills to be held shall have a key operated drill switch to activate the notification appliances in the building,

installed at a remote location outside of the fire alarm control unit, subject to the approval of the AHJ. The drill switch key shall not be the same as the fire alarm control unit key.

## (Add) 13.8.10.5.13

All spaces where fire alarm control units or remote fire alarm control unit equipment (such as auxiliary power supplies) are located shall be protected with a smoke detector(s) spaced in accordance with NFPA 72 — Initiating Devices.

## (Add) 13.8.10.5.14

Elevators shall be recalled to floors or areas as designated by the AHJ. In the event that the designated level is the zone or area in alarm, the elevators shall return to an approved alternate level where they shall be under the exclusive control of the fire department for the duration of the alarm condition.

## (Add) 13.8.10.5.15

In all building covered by this chapter having an elevator(s), required sprinkler coverage by this or any other code of any elevator machine room and any elevator shaft shall not be deleted unless approved by the State Fire Marshal. Any deleted sprinklers shall be replaced with combination rate of rise and fixed temperature heat detectors rated at one hundred thirty-five degrees (135°) to one hundred forty degrees (140°) F. in the shaft and smoke detectors in the machine room, installed at the direction and to the satisfaction of the AHJ.

## (Add) 13.8.10.5.16

All fire alarm control units installed pursuant to §§ 13.8.10.4.2, 13.8.10.4.3 or 13.10.4.4 shall be configured or programmed such that when an alarm is silenced or acknowledged, the municipal connection shall be restorable. This feature shall not require any password, code or other programming operations by fire department personnel in charge of the scene to operate, reset or disconnect the fire alarm system.

#### (Add) 13.8.10.6

INSTALLATION AND WIRING

## (Add) 13.8.10.6.1

All fire alarm system wiring within a building and between buildings in multiple building clusters shall be installed in metal raceway with steel couplings and box connectors or type MC cable rated as FPLP and 2-hour fire rated for penetrations by UL. Cast "LB" or "T" type connectors shall be permitted. An equipment-bonding conductor shall be provided in all flexible metallic raceways.

#### (Add) 13.8.10.6.1.1

EXCEPTION: Wiring between buildings may be buried if enclosed in PVC conduit using approved IMSA<sup>16</sup> shielded cables, or installed either using approved direct burial type MC cable, or run aerial with approved IMSA shielded cable(s) subject to approval by the AHJ.

<sup>&</sup>lt;sup>16</sup> International Municipal Signal Association

## (Add) 13.8.10.6.2

Wiring installation shall meet the following requirements:

## (Add) 13.8.10.6.2.1

All conductors shall be minimum #16 gauge solid copper, type thhn, thwn or tfn. All wiring shall be run continuously from device to device.

## (Add) 13.8.10.6.2.2

The minimum separation between the outgoing and return circuits shall be a minimum of one foot (1') vertically and four feet (4') horizontally in accordance with the provisions of NFPA-72 § 6.4.2.2.2.

## (Add) 13.8.10.6.2.3

A cable-cutting tool with controlled depth of cut shall be used in all MC cable installations.

## (Add) 13.8.10.6.2.4

UL listed type MC cable connectors with insulated bushings and screw type cable attachments shall be used in all MC cable installations. Connectors shall be steel, not the cast type.

## (Add) 13.8.10.6.2.5

Conductor size shall be increased as required so as to limit voltage drop to a maximum of three percent (3%).

## (Add) 13.8.10.6.2.6

All initiating devices and notification appliances shall be supported independently of their attachment to the circuit conductors.

#### (Add) 13.8.10.6.3

The color code for all fire alarm system conductors shall be as follows:

## (Add) 13.8.10.6.3.1

INITIATING DEVICE CIRCUIT shall be red and black. Red shall be positive and black shall be negative [IDC/SLC].

# (Add) 13.8.10.6.3.2

NOTIFICATION APPLIANCE CIRCUIT shall be blue and white. Blue shall be positive and white shall be negative. When bells, chimes or other audible/visual devices are used in lieu of horns, this color code shall be followed [NAC].

## (Add) 13.8.10.6.3.3

FLASHING STROBE CIRCUIT, if a separate feed is required, shall be blue and white. Blue shall be positive and white shall be negative.

#### (Add) 13.8.10.6.3.4

SPRINKLER/STANDPIPE CIRCUITS shall be red and black. Red shall be positive and black shall be negative.

## (Add) 13.8.10.6.3.5

SMOKE DETECTOR CIRCUITS, if a separate power feed is required, shall be brown and violet. Violet shall be positive and brown shall be negative.

## (Add) 13.8.10.6.3.6

AUXILIARY REMOTE POWER SUPPLY CIRCUITS shall be brown and violet. Violet shall be positive and brown shall be negative.

## (Add) 13.8.10.6.3.7

ELECTRO-MAGNETIC DOOR HOLDBACK CIRCUITS shall be gray and gray.

## (Add) 13.8.10.6.3.8

MUNICIPAL MASTER BOX TRIPPING CIRCUITS shall be orange and orange. Conductors for this circuit shall be installed in a separate raceway.

#### (Add) 13.8.10.6.3.9

ELEVATOR CAPTURE CIRCUITS shall be brown and yellow.

## (Add) 13.8.10.6.3.10

HVAC SHUTDOWN CIRCUITS shall be orange and yellow.

## (Add) 13.8.10.6.3.11

REMOTE ANNUNCIATOR CIRCUITS shall be violet and numbered at each end.

#### (Add) 13.8.10.6.3.12

BOND WIRES from the control panel to the master box ground rod, and all required bonding conductors shall be green or bare.

#### (Add) 13.8.10.6.3.13

MUNICIPAL FIRE ALARM LOOP from the master box to the municipal loop shall be black and white.

## (Add) 13.8.10.6.3.14

AC SUPPLY CIRCUIT to the main fire alarm control unit shall be white, black and red. The black shall be one phase, and the red shall be the opposite phase, if required. The white shall be the neutral. If a separate feed is required for the battery charger, it shall be black and white unless the main fire alarm control unit requires only one AC feed. In that case, the conductors to the battery charger shall be red and white.

#### (Add) 13.8.10.6.4

Primary AC power and/or battery charger circuits shall be on a dedicated branch circuit(s). Circuit breaker locks shall be provided and listed for use with the applicable circuit breaker. The location of the circuit disconnecting means shall be permanently identified at the fire alarm control unit. AC and DC portions of the system shall be installed in separate raceways. [NFPA 72 § 4.4.1].

## (Add) 13.8.10.6.5

Any fire alarm wiring between the fire alarm control unit and remote terminal cabinets or between remote terminal cabinets may, at the option of the installer, be a multi-conductor cable with each conductor numbered at two-inch (2") intervals. All wiring from a terminal cabinet(s) to an alarm device(s) shall conform to the color code specified before herein. Terminal cabinets with hinged, lockable red covers shall be provided at all junction points. All conductor splices or terminations shall be made on screw-type terminal blocks — wire nuts, butt or crimp type connectors shall not be used. All terminals within a terminal cabinet shall be properly labeled.

## (Add) 13.8.10.6.6

Spacing and location of heat detectors or smoke detectors required by this Code shall be in accordance with NFPA 72.

## (Add) 13.8.10.6.7

Smoke detectors shall not be installed until after the construction clean-up of all trades is complete and final. Detectors that have been installed prior to final cleanup by all trades shall be cleaned or replaced per *NFPA 72* — *Inspection, Testing and Maintenance*. [*NFPA 72* § 5.7.1.11]

## (Add) 13.8.10.7

CONNECTION TO FIRE DEPARTMENT

## (Add) 13.8.10.7.1

Where a municipally connected fire alarm system required by this chapter is installed in a building in a city, town, or fire district having a municipal alarm system, the fire alarm system within the building shall be connected into the municipal system via a local energy master box, auxiliary transmitter, radio master box, or other approved method so that any fire alarm within the building will be automatically transmitted to the municipal fire department dispatch center. Systems installed in buildings in a city, town, or fire district not having a municipal alarm system shall be connected to the community Fire Dispatch Center via a supervised leased telephone line (or other line) but shall not be connected to any service requiring retransmission to the community Fire Dispatch Center.

#### (Add) 13.8.10.7.2

In either event, the AHJ shall be consulted as to the type and location of the master box or auxiliary transmitter or the location of the remote station.

#### (Add) 13.8.10.8

System Acceptance

#### (Add) 13.8.10.8.1

A pretest will be held with the installer and the manufacturer's technical representative present. In addition to the requirements listed below, the pretest shall demonstrate that each smoke detector is operative and produces the intended response. Each smoke detector shall be tested with smoke generated from a wick/punk source or in accordance with the manufacturer's

recommendations to initiate an alarm at its installed location. After certification of a complete pretest, the installing contractor shall provide the AHJ with written documentation from the manufacturer's authorized representative of the outcome of the test and provide a minimum of forty-eight (48) hours notice to the AHJ for the final inspection test. The installing contractor will re-inspect in the presence of the AHJ and the manufacturer's authorized technical representative. A complete test shall be conducted as follows: the installing contractor, in the presence of a representative of the AHJ, shall manually operate every manual fire alarm box, activate every rate of rise type heat detector and rate anticipation heat detector with heat, manually operate or electrically short out every non-restorable fixed temperature heat detector, activate every smoke detector with smoke generated from a wick/punk source or in accordance with the manufacturer's recommendations to demonstrate that smoke can enter the chamber and initiate an alarm, activate all automatic extinguishing system switches and activate every water sprinkler/standpipe flow switch by a flow of water through the inspectors' test valves.

#### (Add) 13.8.10.8.2

After installation and before the system acceptance test is performed, a copy of the testing and maintenance contract shall be furnished to the AHJ by the owner or contractor. The contractor shall prepare and submit a single line diagram of each installation, as built, indicating wiring between equipment and locations of control units, manual fire alarm boxes, detectors, and other devices to the AHJ.

## (Add) 13.8.10.8.3

Each manual fire alarm box, heat detector, smoke detector, extinguishing system switching circuits, flow switch circuit and each notification appliance circuit shall be opened in at least two locations to test for the correctness of the supervisory circuitry. All communications shall be tested completely. The fire alarm system shall be in accordance with this chapter and in one hundred percent (100%) operation prior to acceptance and/or issuance of a certificate of occupancy.

## (Add) 13.8.10.8.4

The fire alarm system may be placed in operation prior to final acceptance if in the opinion of the AHJ, it will enhance public safety or provide property protection during the final phases of construction. In this case all devices will be thoroughly cleaned or replaced prior to the system acceptance test. The system will not be placed in operation without the written permission of the AHJ. Under no circumstances will this be considered a final acceptance test.

#### (Add) 13.8.10.8.5

Prior to the final operational acceptance test, a *Fire Alarm System Record of Completion* in accordance with *NFPA 72* § 4.5.2.1 shall be prepared and submitted to the property owner and the AHJ.

## (Add) 13.8.10.9

MAINTENANCE OF THE SYSTEM

# (Add) 13.8.10.9.1

Owners of buildings where fire alarm systems are installed shall ensure that the systems and all of their components are in one hundred percent (100%) operating condition at all times and provide a twenty-four (24) hour emergency telephone number of the owner or owner's representative for the fire department to call in the event of an alarm. This telephone number shall be conspicuously posted at the fire alarm control unit

## (Add) 13.8.10.9.1.1

In lieu of the owner's number, the twenty-four (24) hour emergency telephone number of the testing and maintenance company authorized by the owner to respond to service the system may be provided.

## (Add) 13.8.10.9.1.2

Answering machines are not an acceptable method for contacting the owner or authorized service company.

## (Add) 13.8.10.9.2

Owners of buildings where systems are installed shall provide written evidence to the AHJ that there is a testing and maintenance program in force for the fire alarm system providing for periodic testing of the system. A system as described in § 13.8.10.4.1 with twenty-four (24) or fewer initiating devices shall be tested at least once every six (6) months with fifty percent (50%) of all manual fire alarm boxes, heat detectors, smoke detectors and other devices and components operated with each test. A different fifty percent (50%) of the above-mentioned devices will be operated at each inspection so that the entire system will have been tested at the end of each year. All other systems shall be tested at least once every three (3) months with twenty-five percent (25%) of all manual fire alarm boxes, heat detectors, smoke detectors and other devices and components operated with each test. A different twenty-five percent (25%) of the above-mentioned devices will be operated at each inspection so that the entire system will have been tested at the end of each year. In addition to the initiating devices to be tested above, during each test, the fire alarm control unit and every zone shall be tested. It is the intent of this section to reduce the cost and paperwork of testing smaller fire alarm systems while maintaining the integrity of those systems.

## (Add) 13.8.10.9.2.1

In addition to the testing and maintenance requirements set forth above, an annual certification shall be provided to the AHJ that all smoke detectors located within the protected building have been cleaned in accordance with the manufacturers' recommendations or at least once every twelve (12) month period.

## (Add) 13.8.10.9.2.2

EXCEPTION: A system as described in § 13.8.10.4.1 with twenty-four (24) or fewer initiating devices may be tested quarterly, as described in § 13.8.10.9.2, at the option of the building owner.

## (Add) 13.8.10.9.3

The person(s) and firm performing any testing and/or maintenance required by this Code shall be licensed as required by R.I.G.L. § 5-6-2. <sup>17</sup>

## (Add) 13.8.10.9.3.1

EXCEPTION: This licensing requirement shall not apply to fire department personnel in charge of the scene to operate, reset or disconnect the fire alarm system as authorized by the AHJ.

## (Add) 13.8.10.9.4

The AHJ shall be notified a minimum of forty-eight (48) hours prior to conducting any tests.

## (Add) 13.8.10.9.5

Certification of these tests and results shall be forwarded to the AHJ from the person(s) or firm performing the test within ten (10) days of the completion of the test. The person(s) or firm performing the testing and maintenance of the fire alarm system shall notify the AHJ within five (5) days, in writing, after any cancellation of a testing/maintenance agreement with the building owner.

## (Add) 13.8.10.9.5.1

Certification of any periodic testing required by the Code shall be on a standardized inspection form as developed by the Fire Communications Officers Association of Rhode Island and the State Fire Marshal and approved by the Fire Safety Code Board of Appeal and Review. Once approved, said form shall be utilized by all persons and firms performing fire alarm testing and inspections pursuant to this Code and shall bear the name and license number of the licensed person performing the test.

## (Add) 13.8.10.9.5.2

In addition, the person(s) or firm performing the test shall conspicuously indicate that the fire alarm system providing service at the protected premises complies with all requirements of this Code. A document attesting to this certification shall be located on or within thirty-six inches (36") of the fire alarm control unit following each required test.

#### (Add) 13.8.10.9.5.3

If any deficiencies are discovered during a routine test or inspection and they cannot be corrected within four (4) hours, the AHJ shall be notified, who may invoke the provisions of § 13.1.9 if he or she deems the deficiency to jeopardize the safety of the building occupants.

# CHAPTER 14 MEANS OF EGRESS

# CHAPTER 15 PLANNED BUILDING GROUPS

 $<sup>^{</sup>m 17}$  Businesses and Professions – Electricians – Work for which license required

# CHAPTER 16 SAFEGUARDS DURING BUILDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS

# CHAPTER 17 WILDLAND URBAN INTERFACE

# CHAPTER 18 FIRE DEPARTMENT ACCESS AND WATER SUPPLY

# CHAPTER 19 COMBUSTIBLE WASTE AND REFUSE

# **PART III OCCUPANCY**

# CHAPTER 20 OCCUPANCY FIRE SAFETY

# (Amd) 20.1 Application.

New and existing assembly occupancies shall comply with Section 20.1 and the referenced addition of NFPA *101*, as amended by the Fire Safety Code Board of Appeal & Review, now known as the Rhode Island Life Safety Code.

# CHAPTER 21 AIRPORTS AND HELIPORTS

CHAPTER 22 AUTOMOBILE WRECKING YARDS

> CHAPTER 23 CLEANROOMS

CHAPTER 24 DRYCLEANING

# CHAPTER 25 GRANDSTANDS AND BLEACHERS, FOLDING AND TELESCOPIC SEATING, TENTS AND MEMBRANE STRUCTURES

# CHAPTER 26 LABORATORIES USING CHEMICALS

# CHAPTER 27 MANUFACTURED HOME AND RECREATIONAL VEHICLE SITES

# CHAPTER 28 MARINAS AND BOATYARDS

CHAPTER 29 PARKING GARAGES

CHAPTER 30 MOTOR FUEL DISPENSING FACILITIES AND REPAIR GARAGES

> CHAPTER 31 FOREST PRODUCTS

> > CHAPTER 32 RESERVED

> > CHAPTER 33 RESERVED

> > CHAPTER 34 RESERVED

CHAPTER 35 RESERVED

CHAPTER 36 RESERVED

CHAPTER 37 RESERVED

CHAPTER 38 RESERVED

CHAPTER 39 RESERVED

## **PART IV PROCESSES**

# CHAPTER 40 DUST EXPLOSION PREVENTION

CHAPTER 41 HOT WORK OPERATIONS

> CHAPTER 42 REFUELING

CHAPTER 43
SPRAYING, DIPPING, AND COATING
USING FLAMMABLE OR COMBUSTIBLE MATERIALS

CHAPTER 44 SOLVENT EXTRACTION

CHAPTER 45 RESERVED CHAPTER 46 RESERVED

CHAPTER 47 RESERVED

CHAPTER 48 RESERVED

CHAPTER 49 RESERVED

# **PART V EQUIPMENT**

# CHAPTER 50 COMMERCIAL COOKING EQUIPMENT

# CHAPTER 51 INDUSTRIAL OVENS AND FURNACES

# CHAPTER 52 STATIONARY LEAD-ACID BATTERY SYSTEMS

# CHAPTER 53 MECHANICAL REFRIGERATION

CHAPTER 54 RESERVED

CHAPTER 55 RESERVED

CHAPTER 56 RESERVED CHAPTER 57 RESERVED

CHAPTER 58 RESERVED

CHAPTER 59 RESERVED

# PART VI HAZARDOUS MATERIALS

# CHAPTER 60 HAZARDOUS MATERIALS

CHAPTER 61 AEROSOL PRODUCTS

CHAPTER 62 COMBUSTIBLE FIBERS

# CHAPTER 63 COMPRESSED GASES & CRYOGENIC FLUIDS

64 CORROSIVE SOLIDS AND LIQUIDS

# CHAPTER 65 EXPLOSIVES, FIREWORKS AND MODEL ROCKETRY

(Amd) 65.2.3 Permits.

Permits shall comply with the provisions of section 65.2.3.1 et seq. of this Code.

(Add) 65.2.3.1 Application For Permits

(Add) 65.2.3.1.1

No application for permit shall be issued by the local fire authority, unless applicant is holder of a valid Certificate of Competency issued by the State Fire Marshal

## (Add) 65.2.3.1.2

Application for permit to operate a display of fireworks or pyrotechnics in conformance with the terms of Chapter 28.11 of the General Laws of Rhode Island shall be made in writing on forms provided by the State Fire Marshal, and delivered in person to the chief of the fire department or his designee of the city, town, district or municipality in which the display is to be held.

#### (Add) 65.2.3.1.3

Such application and any addendum necessary shall set forth:

- a. The name of the organization sponsoring the display.
- b. The name of the company and/or individuals actually in charge of firing the display.
- c. Evidence of financial responsibility.
- d. The date and time of day at which the display is to be held.
- e. The exact location planned for the display.
- f. The license number of the person firing the display along with all names of the persons who will b assisting him.
- g. The number, kinds and sizes of fireworks and/or pyrotechnics to be discharged.
- h. The manner and place of storage of such fireworks and/or pyrotechnics prior to the display.
- i. A diagram of the grounds, for all outdoor displays, on which the display is to be held showing the point at which the fireworks are to be discharged, the locations of all buildings, highways and other lines of communication, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone lines or other overhead obstruction.
- j. A diagram of the interior of the building, for all pyrotechnic displays, for where the display is to be held showing the points where the pyrotechnics are to be discharged, the height of the ceilings or overhead obstructions, the distance to interior walls, the distances to the audience, the proximity to persons performing in relation to the pyrotechnics.
- k. A copy of the up to date permit issued by the State Fire Marshal's Office for the vehicle that will be used to transport the commercial fireworks for the display.
- l. A copy of the letter from an attorney, a member of the Rhode Island Bar Association, stating that they represent the nonresident shooter of fireworks and/or pyrotechnics upon whom all processes in any action or proceeding against the person may be served.

## (Add) 65.2.3.1.4

Upon receipt of such application at least 15 days in advance of the date set for this display, the Chief of the Fire Department shall make, or cause to be made, an investigation of the site of the proposed display for the purpose of determining whether the provisions of these regulations are complied with in the case of the particular display. The Chief of the Fire Department or his designee shall endorse the Application, stating that he approves the display as being in conformance with all parts of the law and with these regulations.

## (Add) 65.2.3.1.5

The Chief of the Fire Department, or his designee, upon endorsement of the application and after receipt of evidence of financial responsibility and proof of an attorney for nonresident shooters as required by law, shall issue a nontransferable permit authorizing the display.

## (Add) 65.2.3.2 Conduct Of Display

## (Add) 65.2.3.2.1

In addition to the guidelines set forth by NFPA 1123, Code for Fireworks Display, the following shall apply:

- a. No fireworks display shall be held during any windstorm in which the wind reaches a velocity of more than twenty (20) miles per hour.
- b. The point from where the fireworks are to be fired shall be at least fifty (50) feet from any overhead obstruction.
- c. Any aerial shell which fails to function must be turned over to the State Fire Marshal's office for disposal.

# (Add) 65.2.3.3 Qualification Of Operators.

#### (Add) 65.2.3.3.1

The person in actual charge of the firing of the fireworks or pyrotechnics in a display shall be able-bodied, at least 21 years of age, competent for the task, and so certified by the State Fire Marshal. Such operator shall have his or her Certificate of Competency in his or her possession when engaged in conducting a display and shall exhibit same on request of any authorized person. Said Certificate of Competency may be revoked by the State Fire Marshal for any violation of these regulations or when the holder's conduct or condition of sobriety is such as to imperil the public's safety. Each person assisting the certificated operator shall be able-bodied, at least 18 years of age and capable of reading, writing, speaking, and understanding the English language.

#### (Add) 65.2.3.3.2

There shall be at all times no fewer than two operators of the display constantly on duty during the discharge, at least one of whom shall be certificated.

## (Add) 65.2.3.4 General

## (Add) 65.2.3.4.1

Fire protection and extinguishing equipment shall be provided and required by the Chief of the Fire Department, or his designee.

# (Add) 65.2.3.4.2

The person to whom a permit has been issued shall arrange for the detailing of one member of the local fire department or such larger number as may be deemed necessary by the Chief of the Fire Department or his designee. Fire Department personnel shall be on duty from the time the fireworks are delivered at the site until the termination of the display and the removal of all fireworks and debris from the site. The expense for such firemen shall be paid by the permittee.

## (Add) 65.2.3.4.3

All disputes arising as a result of the administration of these rules and regulations shall be referred to the State Fire Marshal.

## (Add) 65.2.3.4.4

Any person, firm corporation and/or co-partnership aggrieved by the decision of the State Fire Marshal, as outlined in section 65.2.3.4.3 above, may file an appeal and request a hearing before the Fire Safety Code Board of Appeal and Review pursuant to RIGL section 23-28.3-3(d) and section 6-1-1 of the Fire Safety Code.

## (Add) 65.2.3.5 Additional Requirements

#### (Add) 65.2.3.5.1

Dealers and manufacturers of Class B explosives, DOT 1.3, and Class C explosives, DOT 1.4, which includes commercial fireworks and pyrotechnics, shall be subject to provisions of Chapter 23-28.28 of the Fire Safety Code entitled EXPLOSIVES, and the requirements of Chapter 65 of this Code, and no permit or license shall be issued until all requirements of Chapter 23-28.28 and the requirements of Chapter 65 of this Code are fulfilled.

**(Amd) 65.3.3 Permits.** Permits shall comply with the provisions of section 65.2.3.1 et seq. of this Code.

**(Amd) 65.4.2 Permits.** Permits shall comply with the provisions of section 65.2.3.1 et seq. of this Code.

(Amd) 65.5.2 Permits. Permits shall comply with the provisions of section 65.2.3.5.1 of this Code.

## (Add) 65.6.1 Rockets

#### (Add) 65.6.1.1

Model rockets shall comply with the following requirements prior to launch, operation and flight:

- a. Gross weight, including the model rocket motor, shall not exceed 1500 grams (53 ounces).
- b. No more than 62.5 grams (2.2 ounces) of propellant materials shall be contained in a single model rocket motor and no more than 125 grams (4.4 ounces) of propellant shall be contained in a model rocket at the time of launch.
- c. Model rockets shall contain means for retarding decent to the ground so that the structure shall be substantially damaged and no hazard shall be created to persons or property on the ground.
- d. Construction shall be of wood, plastic, paper, rubber or similar materials, and without any metal as structural parts.
- e. Design and construction shall include attached aerodynamic surfaces or other suitable means which will provide stabilizing and restoring forces necessary to maintain a substantially true and predictable flight path.
- f. A model rocket shall not contain any type of explosive or pyrotechnic warhead.

## (Add) 65.6.1.2

Any person who has knowledge of fire or accident caused by a model rocket or rocket motor shall notify the head of the fire department and the Marshal. Failure to comply with this rule shall be cause for revocation of permit.

## (Add) 65.6.2 Solid Propellant Rocket Motors

## (Add) 65.6.2.1

A solid propellant rocket motor shall be a device produced by a commercial manufacturer. It shall have all of the propellant preloaded into the casing in such a manner that the propellant cannot be removed without destroying the motor. Delay trains and ejection charges may be included as an integral part of the motor or may be preloaded and packaged separately if:

- a. The auxiliary package is a single pre-assembled unit containing all of the remaining combustible material, and
- b. The auxiliary package is so designed that an individual would have no difficulty handling or using it safely.

#### (Add) 65.6.2.2

A solid propellant rocket motor casing shall be made of nonmetallic material of low thermal conductivity so that the temperature of the external surface of the model rocket motor shall not exceed 200 degrees Celsius (392 degrees Fahrenheit) during or after operation.

#### (Add) 65.6.2.3

A solid propellant rocket motor casing shall be so designed and constructed that it will not fragment if it should rupture.

## (Add) 65.6.2.4

A solid propellant rocket motor shall be so designed and constructed as to be incapable of spontaneous ignition in air, in water, as a result of physical shocks, jarring, impacts or motion under conditions that would reasonably be expected to occur during shipment, storage and use, or when subjected to a temperature of 80 degrees Celsius (176 degrees Fahrenheit) or less.

# (Add) 65.6.2.5

A solid propellant rocket motor shall contain no more than 62.5 grams (2.2 ounces) of propellant material and shall produce less than 160 Newton-seconds (35.855 pound-seconds) of total impulse with average trust not greater than 100 Newtons.

## (Add) 65.6.2.6

A manufacturer of solid propellant rocket motors shall subject a random sample of one percent (1%) of each motor production lot to a static test which shall measure and record the rocket motor's total impulse, delay time and action of ejection charge, if included. Solid propellant rocket motor production lots shall be corrected, destroyed or retested by the manufacturer under any of the following conditions:

- a. Total impulse of any test item departs more than twenty percent (20%) from the established mean value for the motor type,
- b. The time delay of the test item departs more than twenty percent (20%) from the established mean value for the motor type but in no case shall this variation exceed three (3) seconds,
- c. The ejection charge, if any, of the test item does not function properly,
- d. Any test item malfunctions in any other manner that affects the safety of its shipment, storage, handling or uses. Static tests shall be conducted with the test item at ambient temperature. For a retest, a manufacturer shall test a minimum additional two percent (2%) of the production lot in question. If any additional test item displays any of the above mentioned conditions, the entire production lot shall be corrected or destroyed by the manufacturer.

## (Add) 65.6.2.7

A solid propellant rocket motor type whose performance deviates from the sample test criteria and performance limits detailed above within one (1) year from the date of manufacture shall be withdrawn from commercial sale and redesigned to provide reliable operation when ignited within a period of one (1) year from the date of manufacture. All solid propellant rocket motors shall have imprinted upon the exterior surface of their motor casing the date of manufacture or equivalent coding.

#### (Add) 65.6.2.8

A solid propellant rocket motor shall be shipped and stored with no ignition element installed that can be activated by open flame at a temperature of less than 150 degrees Celsius (302 degrees Fahrenheit) or by incident radio frequency radiation normally encountered in shipping, storage and use. No manufacturer, distributor, or any other person shall sell expose for sale, or

otherwise make available to the public any type of rocket motor ignition device that is intended to be initiated by a hand-held flame.

## (Add) 65.6.2.9

A model rocket motor shall be shipped and sold with complete instructions for storage, handling and use. The instructions shall contain a warning to read and follow all instructions carefully and to use the motor only in accordance with instructions. In addition, the instructions shall contain the following information:

- a. How to safety ignite the motor safely by electrical means,
- b. Performance data on the model rocket motor type to include propellant weight, total impulse, average thrust, time delay and representative thrust time curve,
- c. Any specific first aid data or action to be taken in the event of burns or oral ingestion of the propellant;
- d. Proper and safe disposal of the rocket if it has become too old, been subjected to conditions that may impair its performance or, in the opinion of the use, may have become unsafe,
- e. Any special action that must be taken to fight any fire in which stored rocket motors may be involved.

## (Add) 65.6.2.10

The competent person responsible for handling the rocket motors shall notify the Marshal whenever he is aware of defects in such motors. He should describe the defect and include the manufacturer's name and model or catalog number of the defective device.

# (Add) 65.6.3 Location For Operation

## (Add) 65.6.3.1

Flight areas shall be located in areas that will not create a hazard to persons and property in the vicinity of the area.

#### (Add) 65.6.3.2

A model rocket launch site shall be at least one hundred feet (100') from the nearest building and fifty feet (50') from a public way or the nearest natural or man-made obstruction or at a distance equal to the height of such obstruction, whichever is greater.

## (Add) 65.6.3.3

Flight areas shall not contain or be located adjacent to limited access highways, buildings over four (4) stories in height or other similar obstacles.

## (Add) 65.6.4 Launching

## (Add) 65.6.4.1

The competent person responsible for supervising the launching of model rockets shall make certain that these rules and regulations are being adhered to by all present at the launch site and shall also be familiar with and conduct the launch in accordance with the instructions supplied with the model rockets or rocket motors and these regulations shall take precedence.

## (Add) 65.6.4.2

All model rockets shall be launched from a launch rod or other device that provides rigid guidance until the rocket has reached a speed adequate to ensure a safe flight path. The launcher shall have a jet deflector device to prevent the motor exhaust from hitting the ground directly. (NFPA 1122 A-2.8.)

## (Add) 65.6.4.3

Launching or ignition shall be conducted by remote electrical means fully under the control of the person launching the model

## (Add) 65.6.4.4

All persons within one hundred (100) feet of the launch site shall be notified of the timing of each launch by an audible warning and count down.

## (Add) 65.6.4.5

A model rocket shall not be launched so as to create a hazard to aircraft.

## (Add) 65.6.4.6

A model rocket shall not be used as a weapon against ground or air targets, nor shall it be equipped with an explosive or incendiary device of any kind designed to ignite on rocket impact.

## (Add) 65.6.4.7

All materials such as recovery system wadding or igniter holding devices which are subject to high temperatures and ejected from the rocket during the launch and recovery sequence shall be of a sufficiently flame resistant nature so as to prevent any ignition upon landing.

#### (Add) 65.6.4.8

All personnel conducting or assisting in the launching shall remain at least fifteen feet (15') from models containing motors totaling 30 Newton-seconds or less of total impulse and at least thirty feet (30') from models exceeding this limit, during the countdown and launching. Spectators and others not participating in the launching activities shall maintain a distance of at least one hundred feet (100') from the launching device.

## (Add) 65.6.5 Test And Experiments

#### (Add) 65.6.5.1

Model rocket motors may be tested on the ground for the purpose of determining performance or may be used as the motive power of an experiment conducted on the ground under the supervision of a competent person with a permit.

## (Add) 65.6.5.2

The model rocket motor shall be securely affixed to a testing device or to an immovable structure in such a manner that such motor shall not become free during the conduct of such test or experiment.

## (Add) 65.6.5.3

The model rocket motor shall be ignited only by remotely operated electrical means fully under the control of the person conducting the test or experiment.

## (Add) 65.6.5.4

When tests or experiments are conducted indoors, the exhaust from each model rocket motor so tested shall be directed into a non-flammable hood or vent which shall lead to the outside of the building.

## (Add) 65.6.5.5

Before a model rocket motor may be tested or used experimentally on the ground its exhaust path shall be cleared of all flammable objects prior to the igniting of such motor.

## (Add) 65.6.5.6

Persons who conduct, participate in or observe static or ground testing of a model rocket motor shall stand a distance no less than five feet (5') away from such motor, and never within a thirty (30) degree angle of a direct line with its longitudinal axis during the conduct of the test.

## (Add) 65.6.5.7

Static test shall be conducted with the test item at a temperature of less than 50 degrees Celsius (122 degrees Fahrenheit).

#### (Add) 65.6.5.8

The competent person with a permit shall inspect each model rocket motor to be tested and the testing device to be used before such test may be conducted.

#### (Add) 65.6.6. Permits

## (Add) 65.6.6.1

Any person who handles, stores, sells, buys, transports or ignites a rocket motor must have a permit from the head of the fire department or must be accompanied by and be under the supervision of a person with a permit.

#### (Add) 65.6.6.2

Any person eighteen (18) years of age or older desiring to oversee the launching of model rockets propelled by a model rocket motor shall first obtain a permit from the head of the fire department.

## (Add) 65.6.6.3

A person under eighteen (18) years of age but not less than fourteen (14) years of age wishing to handle transport or detonate model rocket motors may do so only after first receiving consent

from a parent or legal guardian on the proper forms and having been approved by the fire authority having responsibility for the prevention and suppression of fire in that city or town. In the case where there is no fire authority, these forms shall be approved by the State Fire Marshal or his Deputies.

# (Add) 65.6.6.4

The head of the fire department shall issue the permit to a competent person after that person has shown proof of age and the fact that he has in his possession a copy of these regulations. Such permit shall be valid for a period of one (1) year unless otherwise revoked.

# (Add) 65.6.6.5

Any person wishing to handle, store, buy, transport or ignite rocket motors must first obtain a permit from the head of the fire department in the city or town of his residence at the time of such application or in the city or town wherein he intends to comply with these rules and regulations.

#### (Add) 65.6.6.6

A competent person who wishes to ignite or supervise the launching of motors in another city or town may do so after first receiving permission from the fire department of the city or town in which he expects to conduct the launch. The requirement for repeated notification on return visits to such city or town shall be left to the discretion of the head of the fire department of that city or town.

### (Add) 65.6.6.7

Any person requiring a permit under these regulations who is not a resident of the State of Rhode Island may obtain a permit from the head of the fire department in the city or town where he is living at the time or where he intends to comply with these rules and regulations.

# (Add) 65.6.6.8

Rocket motors shall be kept at all times during storage and transportation in a sturdy metal or wooden box, complete with a cover which may be latched or locked closed.

#### (Add) 65.6.6.9

Any person, corporation or firm wishing to sell solid propellant rocket motors must first obtain a permit for storage and sale from the head of the fire department of the town in which the storage and sale is to be made. Such permits shall be in effect for one (1) year after the date of issue, unless otherwise revoked.

#### (Add) 65.6.6.10

Any solid propellant rocket motors which are being stored for sale shall be kept in a sturdy metal or wooden chest or drawer which must be kept securely clamped or locked shut when not in use. Such containment units must be located in a space approved by the head of the fire department, at least ten (10') feet from any flammable liquids. Failure to comply with this rule may be cause for revocation of the permit.

### (Add) 65.6.6.11

Whenever the solid propellant rocket motors are loaded or manufactured, they shall be considered Class B explosives and shall be handled in compliance with the Fire Safety Code, Chapter 28-28.

# (Add) 65.6.6.12

Quantities of solid propellant rocket motors in excess of ten thousand (10,000) shall be classified as a Class B explosives and shall be handled, transported and stored in accordance with the Fire Safety Code, Chapter 28.28.

### (Add) 65.6.6.13

Quantities of Solid propellant rocket motors of ten thousand (10,000) or less shall be classified as Class C explosives in accordance with the Fire Safety Code, Chapter 28.28.

**(Amd) 65.7.2 Permits.** Permits shall comply with the provisions of section 65.6.1 et seq. of this Code.

**(Amd) 65.8.2 Permits.** Permits shall comply with the provisions of section 65.6.1 et seq. of this Code.

**(Amd) 65.9.2 Permits.** Permits shall comply with the provisions of section 65.9.3.1 et seq. of this Code.

### (Add) 65.9.3 General Provisions

#### (Add) 65.9.3.1

The handling and firing of explosives shall be performed by a person possessing a license to conduct blasting operations and a user's permit.

#### (Add) 65.9.3.2

A permit to blast shall be obtained from the State Fire Marshal at least three (3) working days prior to requested blast time. Working days are Monday through Friday; with Saturday, Sunday and Holidays excluded.

#### (Add) 65.9.3.3

No person shall handle explosives while under the influence of intoxicants or narcotics, or while in an emotional state.

#### (Add) 65.9.3.4

Blasting shall be conducted so as to prevent injury, hazards or unsafe conditions to persons or damage to property outside the controlled blasting site, and the State Fire Marshal may require certain precautionary procedures at any time to protect life and property. The State Fire Marshal may suspend, revoke or deny a permit to blast at any location for just cause if no precautionary steps are available to adequately protect life and property.

No person shall carry matches or smoke while handling explosives, or while in the vicinity thereof. There shall be no open flame in the vicinity.

# (Add) 65.9.3.6

Blasting operations shall be conducted between sunrise and sunset; exceptions may be authorized by the State Fire Marshal.

# (Add) 65.9.3.7

Precautions shall be taken to prevent accidental discharge of blasting caps and explosives from current induced by radios, radar transmitters, lightning, adjacent power lines, dust storms, or other sources of extraneous electricity. These shall include:

- a. The suspension of all blasting operations and removal of persons from the blasting area during the approach and progress of an electrical storm.
- b. The posting of signs warning against the use of mobile radio transmitters on all roads within three hundred feet (300') of the blasting site.
- c. Caution must be taken by following the recommendations of the Institute of Makers of Explosives, and/or by the use of non-electric blasting caps, in the one and one-half (1 1/2) mile radius of radios, transmitters, or high tension power lines.

#### (Add) 65.9.3.8

Whenever blasting is being conducted in the vicinity of gas, electric, water, fire alarm, telephone, or any other utility, the blaster shall immediately notify the appropriate representatives of such utilities in advance of blasting, specifying the location and intended time of blasting.

# (Add) 65.9.3.9

Persons authorized to prepare explosive charges or conduct blasting operations shall use every reasonable precaution; including, but not limited to, warning signals, flags, barricades, or woven wire mats to ensure the safety of the general public and workmen.

#### (Add) 65.9.3.10

Water-gels, binary energy agents, or any similar agents manufactured for the purpose of producing an explosive material shall be transported, stored, and used as specified for explosives in these rules and regulations.

#### (Add) 65.9.3.11

Empty boxes and paper and fiber packaging materials which have previously contained explosives shall not be used again for any purpose, but shall be destroyed by burning at an approved isolated location out of doors and no person shall be nearer than one hundred feet (100') after burning has started.

#### (Add) 65.9.4. Use Of Explosives:

No spark-producing tools shall be used to open kegs or wooden cases or any other explosives container.

# (Add) 65.9.4.2

Wood containers of explosive materials shall not be opened within fifty feet (50') of any magazine.

# (Add) 65.9.4.3

No explosives shall be carried in the pockets, on clothing, or elsewhere on a person.

# (Add) 65.9.4.4

No explosive materials shall be abandoned in any location, or for any reason. No explosives shall be left unattended where they may be accessible to unauthorized persons or children.

# (Add) 65.9.4.5

No primers shall be made up in excess of the immediate needs.

### (Add) 65.9.4.6

No primers shall be made up in a magazine or near an excessive amount of explosives.

### (Add) 65.9.4.7

Nothing other than a fuse shall be inserted into the open end of a blasting cap and no blasting cap shall be tampered with.

#### (Add) 65.9.4.8

When a safety fuse is used, the blasting cap shall be securely attached to the fuse only with an approved cap crimper.

#### (Add) 65.9.4.9

No blasting cap shall be forced into any explosive, but shall be inserted into a hole made with suitable punch.

#### (Add) 65.9.4.10

Primers shall be made up with proven and established methods from the Dupont Blasters' Handbook. The cap shall be securely encased in the explosive and so secured that no tension be placed on the wires or the fuse at the point of entry into the cap.

#### (Add) 65.9.4.11

No explosives that have been water-soaked shall be reclaimed for use without first determining from the manufacturer if explosives are usable.

#### (Add) 65.9.4.12

When blasting is done in a congested area, or in close proximity to a structure, railway, or highway, or any other installation that may be damaged, the blast shall be covered before firing with a mat constructed so that it is capable of preventing fragments from being thrown.

Before a blast is fired, the person in charge shall make certain all surplus explosives are in a safe place; all persons vehicles and equipment are at a safe distance or under sufficient cover, and that a loud warning signal has been sounded.

### (Add) 65.9.4.14

If there are any misfires while using cap-and-fuse, all persons shall remain away from the charge for at least one (1) hour. If electric blasting caps are used and a misfire occurs, this waiting period may be reduced to thirty (30) minutes. Misfires shall be handled under the direction of the person in charge of the blasting and wires shall be carefully traced and a search made for unexploded charges.

# (Add) 65.9.4.15

Blasters, when testing circuits to charged holes, shall use only blasting galvanometers designed for this purpose, or other instruments approved for the purpose by a nationally recognized testing laboratory.

### (Add) 65.9.4.16

Only the man making leading wire connections in electrical firing shall fire the shot. All connections shall be made from the bore hole back to the source of firing current, and the lead wires shall remain shorted and not be connected to the blasting machine or other source of current until the charge is to be fired.

# (Add) 65.9.4.17

All explosives shall be handled carefully at all times and be protected against sudden shock or any such source which may cause detonation or de-flagration.

# (Add) 65.9.4.18

There shall be no smoking, matches, or any source of fire or flame within one hundred feet (100') of an area in which explosives are being handled or used, nor shall explosives be placed where they may be exposed to flame, excessive heat, sparks, or impact.

#### (Add) 65.9.4.19

All connections, such as the connecting of blasting caps to detonating cord, shall be done according to methods recommended by the manufacturer.

## (Add) 65.9.4.20

Dynamite that has been removed from the cartridge shall not be tamped.

#### (Add) 65.9.4.21

Explosives in bore holes shall be confined with sand, earth, clay, or other suitable non-combustible stemming material.

Caution shall be taken so as not to kink or damage fuse or electric blasting cap wires when tamping or loading.

# (Add) 65.9.4.23

The electric firing circuit shall be completely insulated from the ground and other conductors.

# (Add) 65.9.4.24

Only electric blasting caps of the same type and function from the same manufacturer shall be used in the same circuit.

# (Add) 65.9.4.25

All electric blasting caps shall be connected with good contact made and all firing shall be done with no less than the minimum current specified by the manufacturer.

# (Add) 65.9.4.26

Fuse shall be handled carefully so as to avoid damaging the covering or separating the filler.

# (Add) 65.9.4.27

A sufficient length of fuse shall be used so as to allow ample time to reach a place of safety. Never use less than two feet (2').

# (Add) 65.9.4.28

In cutting, seating and crimping the fuse to the cap, the recommended methods from the Dupont Blaster's Handbook shall be used.

#### (Add) 65.9.4.29

All drill holes shall be sufficiently large to admit freely the insertion of the packages of explosive material

#### (Add) 65.9.4.30

No holes shall be loaded, except those to be fired in the next round of blasting. after loading, all remaining explosives shall be immediately returned to an authorized magazine.

# (Add) 65.9.4.31

No person shall be allowed to deepen drill holes which have contained explosives.

## (Add) 65.9.4.32

Drilling shall not be started until all remaining butts of old holes are examined with a wooden stick for unexploded charges and, if any are found, they shall be refired before work proceeds.

#### (Add) 65.9.4.33

Upon the discovery of any unfired explosives, all working operations in that area shall be stopped until such explosives are properly disposed of

Pneumatic loading of blasting agents into blast holes primed with electric blasting caps or other static systems shall conform to the following requirements:

- a. A positive grounding device shall be use d to prevent the accumulation of static electricity.
- b. A semi-conductor discharge hose shall be used.
- c. A qualified person shall evaluate all systems to assure that they will adequately dissipate static potential under field conditions.

# (Add) 65.9.4.35

No explosive material shall be extracted from a hole that has once been charged or has misfired unless it is impossible or hazardous to detonate the unexploded charge by insertion of an additional primer.

### (Add) 65.9.4.36

Tamping shall be done only with wood rods without exposed metal parts but, non-sparking metal connectors may be used for jointed poles. Violent tamping shall be avoided. Primed cartridges shall not be tamped.

# (Add) 65.9.4.37

No holes shall be loaded, except those that are to be fired the same day.

# (Add) 65.9.4.38

No bore hole shall be loaded until it has been carefully checked with a wooden tamping pole to determine its condition.

# (Add) 65.9.4.39

Surplus explosives shall not be kept near the working area during loading.

#### (Add) 65.9.4.40

Detonating cord, extending into a bore hole, shall be cut from the spool before the remainder of the charge is loaded.

# (Add) 65.9.4.41

No bore hole shall be loaded after being drilled or sprung until it is certain that it is cool and that it does not contain any hot metal or burning or smoldering material. No bore hole shall be loaded if its internal temperature approaches or exceeds 150 degrees.

#### (Add) 65.9.4.42

No Bore hole shall be sprung with explosives while near another bore hole loaded with explosives.

No hole, or series of holes, shall be fired in the vicinity of another loaded hole or series of loaded holes unless they are to be fired in an instantaneous or delayed series as approved by the manufacturer.

# (Add) 65.9.4.44

No damaged leading or connecting wire shall be used in any blasting circuits.

### (Add) 65.9.4.45

Frozen or partially frozen explosives shall not be placed or used in bore holes.

# (Add) 65.9.4.46

Caution shall be taken not to drop a large size heavy cartridge directly on the primer.

### (Add) 65.9.4.47

When blasting near power lines, no leg or lead wires shall be long enough to come into contact with the electric power lines.

# (Add) 65.9.5. Storage Of Explosives On Land:

# (Add) 65.9.5.1

Explosives shall be stored only in magazines which are clean, dry, well ventilated where appropriate, reasonably cool, properly located, substantially constructed, bullet and fire resistant, and securely locked.

#### (Add) 65.9.5.2

No explosives shall be stored near oil, gas, cleaning solvents, or any other flammable or corrosive substances.

# (Add) 65.9.5.3

Explosives shall be stored in an approved magazine at least five hundred feet (500') away from blasting operations.

#### (Add) 65.9.5.4

No explosives shall be stored near any source of possible heat, fire or flame, nor shall combustible or flammable debris be allowed to accumulate near explosives.

## (Add) 65.9.5.5

In the event that nitroglycerin from deteriorated explosives has leaked onto a floor or other area, the manufacturer shall be consulted as to the desensitizing process. The State Fire Marshal shall also be notified.

#### (Add) 65.9.5.6

No smoking, burning, discharging of firearms, or other possible source which could cause detonation or deflagration of explosives shall be allowed in the vicinity of any explosives magazine.

Each magazine shall at all times be under the control of a competent person.

# (Add) 65.9.6. Transportation Of Explosives:

# (Add) 65.9.6.1

No person shall deliver to any other person any Class "A" or Class "B" explosives unless the person to whom such explosives are delivered exhibits a license to conduct blasting operations and a permit to possess or a permit to use explosives issued by the State Fire Marshal. All such explosives shall except as otherwise provided, be delivered directly to an approved magazine as required by State and Federal Law. No person shall buy, receive, or accept delivery of any Class "A" or Class "B" explosives unless he possesses adequate storage facilities as required by State and Federal Law.

# (Add) 65.9.6.2

The provisions of this rule as they apply to storage facilities of the receiver may be waived if delivery is made in an approved magazine direct to the job site for immediate placement in previously prepared drill holes and further provided that the explosives are to be detonated in their entirety prior to sunset of the day of delivery.

### (Add) 65.9.6.3

All explosive contents of portable magazines shall be removed and placed into an approved permanent magazine at the end of each day. No explosives shall be stored in a portable magazine overnight.

### (Add) 65.9.6.4

If fire should come into contact with explosives, all personnel shall be removed to a safe location and the area guarded against intruders and no attempt shall be made to fight such a fire except from a safe distance or shelter.

#### (Add) 65.9.6.5

Any vehicle used to transport explosives shall be in proper working condition and shall be equipped with the proper magazine or magazines which shall be securely attached to the vehicle to prevent falling off The explosives shall be so located so as not to be in contact with any source of heat, such as an exhaust pipe.

## (Add) 65.9.6.6

No metal, flammable, or corrosive substances shall be transported with explosives.

#### (Add) 65.9.6.7

All explosives shall be handled carefully and never thrown from the vehicle.

# (Add) 65.9.6.8

Radio transmitters shall be shut off on vehicles transporting explosives.

No smoking shall be allowed on any vehicle containing Class "A" or Class "B" Explosives.

# (Add) 65.9.7 Additional Requirements

# (Add) 65.9.7.1

Any situation not covered by these Rules and Regulations shall be covered by NFPA Standard 495 and 498 referenced in section 65.9.1 of this Code.

(Amd) 65.10.2 Permits. Permits shall comply with the provisions of section 65.9.3.1 et seq. of this Code.

**(Res) 65.11.2 through 65.11.12.7.** Sections 65.11.2 through 65.11.12.7 are hereby reserved due to the fact that the retail sale of consumer fireworks is a prohibited activity in the State of Rhode Island.

# CHAPTER 66 FLAMMABLE AND COMBUSTIBLE LIQUIDS

# CHAPTER 67 FLAMMABLE SOLIDS

# CHAPTER 68 HIGHLY TOXIC AND TOXIC SOLIDS AND LIQUIDS

# CHAPTER 69 LIQUEFIED PETROLEUM GASES AND LIQUEFIED NATURAL GASES

#### (Amd) 69.1.2 Permits.

Any firm desiring to engage in the business of storing, handling or dispensing LPG and/or LNG shall make written application to the State Fire Marshal, on forms provided by the State Fire Marshal. A certification of registration and permit shall be required for each separate facility. The application must be signed by the sole proprietor, or each partner, or by an officer of the company responsible for the acceptance of service of process.

#### (Amd) 69.1.3

Upon receipt of said application, the State Fire Marshal shall schedule a fire safety inspection of the facility of the facility in accordance with the provisions of chapter 69 of this Code and its referenced standards.

#### (Amd) 69.1.4

All permits must be renewed by January 1<sup>st</sup> annually.

# (Amd) 69.1.5 Permit fee.

Each annual application for a permit hereunder shall be accompanied by a permit fee of twenty-five (\$25.00) dollars, by check or money order made payable to the State of Rhode Island.

# (Amd) 69.1.6 Expiration of permits.

All permits hereunder shall expire on the last day of each calendar year unless revoked under section 69.1.7, or unless an earlier expiration date is specifically noted on the permit.

# (Amd) 69.1.7 Revocation.

The State Fire Marshal may either refuse to issue or renew, or he may suspend or revoke, any Certificate of Registration or Permit, for cause.

# (Amd) 69.1.8 Sufficient cause, includes, but is not limited to, the following:

- a. A gross malpractice or gross incompetence in the handling, storage or dispensing of LPG or LNG
- b. Violation of any provision of the Fire safety Code in general and/or this Chapter 69 in particular.
- c. A fire, explosion or other comparable incident at any facility under the control the permit holder.

### (Amd) 69.1.9 Hearings and review.

Any person, firm, corporation, and/or co-partnership aggrieved by the decision of the State Fire Marshal to suspend, revoke or refuse to issue or renew a permit may petition the Fire Safety Code Board of Appeal & Review for a hearing pursuant to section 6-1-1 et seq. of the Fire Safety Code.

(Add) 69.7.1 In addition to the requirements set forth in section 69.7, all existing, new, and modified liquefied petroleum gas plants and systems, having a total container water capacity in excess of 1,000 gallons, shall further provide the AHJ with an engineering study evaluating the liquefied petroleum gas plant and system's susceptibility to earthquake damage using the current procedures recommended by Factory Mutual, the Army Corps of Engineers and the seismic evaluation standards issued by FEMA.

# (Add) 69.7.2

All new, existing, and modified liquefied petroleum gas plants and systems shall further comply with earthquake protection standards outlined in NFPA chapter 59 along with all other safety requirements mandated by the AHJ after his or her review of the engineering study outlined in section 69.7.1.

### (Add) 69.8.1

In addition to the requirements set forth in section 69.8, all existing, new, and modified liquefied natural gas plants and systems, having a total container water capacity in excess of 1,000 gallons, shall further provide the AHJ with an engineering study evaluating the liquefied natural gas plant and system's susceptibility to earthquake damage using the current procedures recommended by Factory Mutual, the Army Corps of Engineers and the seismic evaluation standards issued by FEMA.

# (Add) 69.8.2

All new, existing, and modified liquefied natural gas plants and systems shall further comply with earthquake protection standards outlined in NFPA chapter 59A along with all other safety requirements mandated by the AHJ after his or her review of the engineering study outlined in section 69.7.1.

# CHAPTER 70 OXIDIZERS AND ORGANIC PEROXIDES

# CHAPTER 71 PYROPHORIC SOLIDS AND LIQUIDS

# CHAPTER 72 UNSTABLE (REACTIVE) SOLIDS AND LIQUIDS

# CHAPTER 73 WATER-REACTIVE SOLIDS AND LIQUIDS

ANNEX A

ANNEX B

**ANNEX C** 

ANNEX D

ANNEX E

**ANNEX F** 

ANNEX G

ANNEX H

ANNEX I

ANNEX J

ANNEX K

# RHODE ISLAND FIRE SAFETY CODE SECTION 8

# RHODE ISLAND LIFE SAFETY CODE OF THE RHODE ISLAND FIRE CODE

The Life Safety Code of the National Fire Protection Association, Inc., Standard 101 (NFPA 101), 2003 edition, with appendices, except those portions specifically reserved, deleted, altered, added to, or otherwise amended as outlined in section 8 herein, and including all of the specific amendments to Standard 101, as outlined in section 8 herein, is hereby adopted by reference as the Rhode Island Life Safety Code. Copies of NFPA 101, 2003 edition, are available from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy Massachusetts 02269-9101. The National Fire Protection Association's telephone number is 1-800-344-3555.

Copies of the reservations, deletions, alterations, additions and other amendments to this code, also known as the Rhode Island Fire Code Section 8, will be initially made available at the offices of the Rhode Island Fire Safety Code Board of Appeal and on the Fire Board's website at <a href="https://www.fsc.state.ri.us">www.fsc.state.ri.us</a>. Copies shall subsequently be available from LexisNexis / Matthew Bender & Co., 1275 Broadway, Albany, N.Y. 12204-2694. The LexisNexis telephone number is 1-800-562-1197.

The State Fire Marshal is the sole authority having jurisdiction for the strict enforcement of the Rhode Island Life Safety Code. The Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction for administration of the Rhode Island Life Safety Code. Accordingly, the Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction to grant variances, waivers, modifications and amendments from, or to review and accept any proposed fire safety equivalencies and alternatives to, the strict adherence to the provisions of the Rhode Island Life Safety Code and all referenced standards therein.

For the purposes of uniform administration, all exceptions listed in the Rhode Island Life Safety Code and its referenced standards, allowing for a discretionary waiver by the authority having jurisdiction, shall be referred directly to the Fire Safety Code Board of Appeal & Review as outlined in Fire Safety Code section 6-1-1 et seq. The only official formal and binding interpretations of the provisions of the Rhode Island Life Safety Code and its referenced standards are those approved and published by the Fire Safety Code Board of Appeal & Review pursuant to the procedures outlined in Fire Safety Code Section 6-1-3 et seq.

All new buildings and structures, for which a building permit is issued on or after February 20, 2004, shall be subject to the provisions of the Rhode Island Life Safety Code addressing the new occupancy.

All existing buildings and structures, and those buildings and structures for which a building permit was issued prior to February 20, 2004, shall be subject to the provisions of the Rhode Island Life Safety Code addressing the existing occupancy.

Any existing building or structure, subject to the provisions of the Rehabilitation Building and Fire Code for existing Buildings and Structures, shall also comply with the existing occupancy provisions of the Rhode Island Life Safety Code addressing the current or proposed occupancy.

All existing protection systems, such as sprinklers, fire alarms, emergency lighting and exit signs, installed in existing buildings, shall continue to be properly maintained.

The effective date of the "Rhode Island Life Safety Code" shall be February 20, 2004.

The provisions of NFPA 101, 2003 edition, as amended and referenced below, and incorporated herein as the "*Rhode Island Life Safety Code*", shall be preceded by the acronym "RILSC". All of the remaining provisions of NFPA 101, 2003 edition, adopted as the "*Rhode Island Life Safety Code*", but not specifically addressed below, shall likewise be identified by the acronym "RILSC" preceding it. (Accordingly, "Chapter 1" below would be identified as "RILSC 1". Likewise, "Section 1.1.2" below would be identified as "RILSC 1.1.2".)

# CHAPTER 1 ADMINISTRATION

# 1.1 Scope

#### (Amd) 1.1.1 Title.

The Title of this code shall be known as the "Rhode Island Life Safety Code", is cited as such, and shall be referred to herein as "this Code" or "the Code"

# (Add) 1.1.1.2 Relationship to other fire codes.

The "Rhode Island Life Safety Code" (NFPA 101, 2003 Edition, as amended) and the "Rhode Island Uniform Fire Code" (NFPA 1, 2003 Edition, as amended) comprise the "Rhode Island Fire Safety Code" as mandated by the Comprehensive Fire Safety Act of 2003.

The "*Rhode Island Fire Safety Code*" is the major component of the "*Fire Safety Code*" which includes all other statutory mandates found in chapter 28 of title 23 of the Rhode Island General Laws along with any additional rules and regulations adopted, by the Fire Safety Code Board of Appeal and Review, pursuant to R.I.G.L. 23-28.3-3.

#### 1.3 Application

# (Amd) 1.3.1 New and Existing Buildings and Structures.

The *Code* shall apply to both new construction and existing buildings and structures. All new buildings and structures, for which a building permit is issued on or after February 20, 2004, shall be subject to the provisions of *Rhode Island Fire Safety Code* addressing the new occupancy. All existing buildings and structures, and those buildings and structures for which a building permit was issued prior to February 20, 2004, shall be subject to the provisions of the

Rhode Island Fire Safety Code addressing the existing occupancy. Any existing building or structure, subject to the provisions of the Rehabilitation Building and Fire Code for Existing Buildings and Structures, shall also comply with the existing occupancy provisions of the Rhode Island Fire Safety Code addressing the current or proposed occupancy. All active fire protection systems, such as sprinklers, fire alarms, emergency lighting and exit signs, installed in existing buildings shall be properly maintained.

#### (Amd) 1.4

Nothing in this Code is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this code provided that any proposed equivalent systems, methods and devices are first approved by the Fire Safety Code Board of Appeal & Review.

# (Amd) 1.4.2 Approval.

The system, method, or device shall be approved for the intended purpose by the Fire Safety Code Board of Appeal & Review.

# (Amd) 1.4.3 Equivalent Compliance.

Alternative systems, methods, or devices approved as equivalent by the Fire safety Code Board of Appeal & Review shall be recognized as being in compliance with this code.

# (Amd) 1.6 Enforcement and Administration.

# (Add) 1.6.1 Enforcement.

The State Fire Marshal is the sole authority having jurisdiction for the strict enforcement of the provisions of this Code. The State Fire Marshal shall have authority to appoint and certify as many deputy state fire marshals and assistant deputy state fire marshals as are deemed necessary to strictly enforce the provisions of this Code. Accordingly, all deputy state fire marshals and assistant deputy state fire marshals shall be allowed to enforce this code as long as they maintain their certification in the above positions by the State Fire Marshal.

#### (Add) 1.6.2. Administration.

The Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction for administration of this Code. Accordingly, the Fire Safety Code Board of Appeal & Review is the sole authority having jurisdiction to grant variances, waivers, modifications and amendments from, or to review and accept any proposed fire safety equivalencies and alternatives to, the strict adherence to the provisions of this Code and all referenced standards herein. For purposes of uniform administration, all exceptions listed in this Code, and its referenced standards, allowing for a discretionary waiver by the authority having jurisdiction, shall be referred directly to the Fire Safety Code Board of Appeal & Review as outlined in Fire Safety Code Section 6-1-1 et seq.

#### (Add) 1.6.2.1

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing administrative appeals, are outlined in Fire Safety Code sections 6-1-1 through 6-1-11.

### (Add) 1.6.2.2

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing administrative hearings and court appeals, are outlined in Fire Safety Code sections 6-2-1 through 6-2-20.

# (Add) 1.6.2.3

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing the board's rule making authority, are outlined in Fire Safety Code sections 6-3-1 through 6-3-5.

# (Add) 1.6.2.4

Procedures, adopted by the Fire Safety Code Board of Appeal & Review, addressing code interpretation by the board, are outlined in Fire Safety Code section 6-4-1 through 6-4-5.

# (Add) 1.6.3

Police and other enforcement agencies shall have authority to render necessary assistance in the enforcement of this Code when expressly requested to do so by the State Fire Marshal.

#### (Add) 1.6.4.

The State Fire Marshal may delegate to other qualified individuals such powers as are necessary for the proper enforcement of the Code. The Fire Safety Code Board of Appeal & Review may delegate to its appointed staff such powers as are necessary for the proper administration of this Code.

# (Add) 1.6.5.

The State Fire Marshal is authorized to inspect, at all reasonable times, any building or premises for dangerous or hazardous conditions or materials as set forth in this Code and the general provisions of the Fire Safety Code. The State Fire Marshal may order any person(s) to remove or remedy such dangerous or hazardous condition or material. Any person(s) failing to comply with such an order shall be in violation of the Fire Safety Code. Any person so charged with a violation of this Code shall have the right to appeal the order of the State Fire Marshal to the Fire Safety Code Board of Appeal & Review. An appeal does not automatically stay the State Fire Marshal's order. However, the Chairman of the Board, or his designee, may, for good cause shown, stay the order of the State Fire Marshal pending review by the full Board.

# (Add) 1.6.6. Abatement.

The State Fire Marshal, or his or her designee within the division, or an assistant deputy state fire marshal in accordance with the guidelines established by the State Fire Marshal and with the State Fire Marshal's approval, has the authority to summarily abate any condition which presents immediate danger to life, which conditions shall include improper management or use of flammable and combustible materials, liquids and gasses, pyrotechnics, fireworks or explosives, malfunctioning heating and electrical systems, and blocked or inadequate exits or means of egress, and other such conditions as may be established by the Fire Safety Code Board of Appeal & Review. A failure to abate a condition that presents a clear and immediate danger to life shall be grounds for the person issuing the order to abate, to require that the premises be vacated, which action shall be either authorized by the State Fire Marshal or a designee of the State Fire

Marshal who has been given advanced written authority by the State Fire Marshal to approve such actions

# CHAPTER 2 REFERENCED PUBLICATIONS

# (Add) 2.2.1

Additional NFPA Publications: National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101

NFPA 720, Recommended Practice for the Installation of Household Carbon Monoxide (CO)Warning Equipment, 2003 edition.

# CHAPTER 3 DEFINITIONS

# (Amd) 3.3.27.3

**Apartment Building**. A building or portion thereof containing four or more dwelling units with independent cooking and bathroom facilities.

# (Add) 3.3.27.3.1

*Three Family Apartment Building.* A building or portion thereof containing three dwelling units with independent cooking and bathroom facilities. This code shall provide reasonable standards and a timetable for the installation of smoke and carbon monoxide detectors in three family apartment buildings.

# (Add) 3.3.152.2.2

Special Amusement Building Concentrated Occupancy Place of Assembly. The term "special amusement building concentrated occupancy place of assembly" shall mean a place of assembly with a maximum occupancy calculated on the basis of less than fifteen square feet (15 sq. ft.) per person and for which either there is a license issued pursuant to Rhode Island General Law chapter 3-7 or there is entertainment or there are both a liquor license and entertainment. The above fifteen square feet (15 sq. ft.) per person calculation shall be exclusive of any separately calculated limited incidental spaces designated as a waiting area by the AHJ. This classification of occupancy shall also not apply buildings, containing separately calculated booths or similar fixed seating, determined not to be concentrated occupancies by the AHJ.

*Emergency Shelter Occupancy.* A building or portion thereof, used on a temporary basis, to provide sleeping accommodations for transient individuals who have no alternative shelter arrangements during periods of severe life-threatening weather.

# CHAPTER 4 GENERAL

# CHAPTER 5 PERFORMANCE-BASED OPTIONS

# CHAPTER 6 CLASSIFICATION OF OCCUPANCY AND HAZARD OF CONTENTS

# CHAPTER 7 MEANS OF EGRESS

# CHAPTER 8 FEATURES OF FIRE PROTECTION

# CHAPTER 9 BUILDING SERVICE AND FIRE PROTECTION EQUIPMENT

# (Amd) 9.6.1.3

A fire alarm system required for life safety shall be installed, tested, and maintained in accordance with the applicable requirements of NFPA 70, National Electrical Code, NFPA 72, National Fire Alarm Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Amd) 9.6.1.6

To ensure operational integrity, the fire alarm system shall have an approved maintenance and testing program complying with the applicable requirements of NFPA 70, National Electrical Code, NFPA 72, National Fire Alarm Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Res) 9.6.3.2.1 through 9.6.3.2.4

Sections 9.6.3.2.1 through 9.6.3.2.4 of the Rhode Island Life Safety Code are hereby reserved pending future review by the Rules and Regulations Subcommittee of the Fire Safety Code Board of Appeal & Review.

### (Res) 9.6.3.5.1 through 9.6.3.5.6

Sections 9.6.3.5.1 through 9.6.3.5.6 of the Rhode Island Life Safety Code are hereby reserved pending future review by the Rules and Regulations Subcommittee of the Fire Safety Code Board of Appeal & Review.

# (Add) 9.6.8

Any building that is not a place of assembly, that is required to be equipped with a fire alarm pursuant to this Code, shall be so equipped on or before July 1, 2005.

# (Add) 9.7.1.1.1

In the retrofitting of an existing building with sprinklers, alternatively engineered sprinkler systems, approved for the specific occupancy by the Fire Safety Code Board of Appeal & Review, may be substituted for the systems outlined in 9.7.1.1 with the approval of the AHJ.

# CHAPTER 10 INTERIOR FINISH, CONTENTS, AND FURNISHINGS

# CHAPTER 11 SPECIAL STRUCTURES AND HIGH-RISE BUILDINGS

# (Amd) 11.2.3.4

**Detection, Alarm, and Communications Systems.** Open structures shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, if so required by the provisions of those Codes.

#### (Amd) 11.3.3.4

**Detection, Alarm, and Communications Systems.** Towers shall be provided with a fire alarm system in accordance with amended Section 9.6 and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, if so required by the provisions of those Codes.

### (Amd) 11.4.3.4

**Detection, Alarm, and Communications Systems.** Water-surrounded structures shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, if so required by the provisions of those codes.

#### (Amd) 11.8.3.1

A fire alarm system using an approved, emergency voice / alarm communication system shall be installed in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

### (Add) 11.8.3.3

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 12 NEW ASSEMBLY OCCUPANCIES

# (Amd) 12.2.5.4.1

Festival seating, as defined in 3.3.188.1, shall be prohibited within a building, unless otherwise permitted by the following:

- (1) Festival seating shall be permitted in assembly occupancies having occupant loads of 250 or less
- (2) Festival seating shall be permitted in assembly occupancies where occupant loads exceed 250 and an approved life safety evaluation has been performed. (See 12.4.1)

# (Amd) 12.3.4.1

All assembly occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

### (Amd) 12.3.5.1

All new places of assembly shall be completely protected by an approved system of automatic sprinklers installed and maintained in accordance with 9.7.1.1.

#### (Add) 12.3.5.2.1

The requirements of 12.3.5.1 shall also not apply to the following:

(1) Any place of assembly of less concentrated use, with an occupancy of 300 or fewer people, calculated at 15 square feet per person.

(The above fifteen square feet (15 sq. ft.) per person calculation shall be exclusive of any separately calculated limited incidental spaces designated as a waiting area by the AHJ. The above fifteen square feet (15 sq. ft.) per person calculation shall also not apply buildings, containing separately calculated booths or similar fixed seating, determined not to be concentrated occupancies by the AHJ.)

- (2) Any place of assembly of concentrated use, with an occupancy of 300 or fewer people, not meeting the definition of a *Special Amusement Building Concentrated Occupancy Place of Assembly* as outlined in 3.3.152.2.2.
- (3) Any place of assembly of concentrated use, meeting the definition of a *Special Amusement Building Concentrated Occupancy Place of Assembly*, as outlined in 3.3.152.2.2, with a posted maximum occupancy of less than 150 people.

### (Add) 12.3.5.4

Any place of assembly, not required to be sprinkled, shall render all furniture, decorative and acoustical materials, floors, walls, ceilings and their coverings flame resistant, by the application of fire retardant materials approved by the Fire Safety Code Board of Appeal & Review.

# (Add) 12.3.5.5

The requirements of 12.3.5.4 shall not apply to a place of assembly that voluntarily installs approved sprinklers, in accordance with 9.7.1.1.

# (Add) 12.4.7.1.1

All Special Amusement Building Concentrated Occupancy Places of Assembly, as defined in 3.3.152.2.2, shall comply with the requirements of 12.4.7.2 through 12.4.7.8 and shall be inspected annually by the AHJ.

### (Add) 12.4.7.1.2

Each stage area, within *Special Amusement Building Concentrated Occupancy Place of Assembly*, shall be provided with, and maintain, two fire extinguishers approved by the Fire Safety Code Board of Appeal & Review.

# (Add) 12.4.7.1.3

The responsible management of each *Special Amusement Building Concentrated Occupancy Place of Assembly*, shall provide an audible announcement of the location of emergency exits prior to each act or set.

# (Add) 12.4.7.1.4

The responsible management of each *Special Amusement Building Concentrated Occupancy Place of Assembly*, shall have an emergency plan for the rapid evacuation of the premises approved by the state fire marshal. The plan shall identify the egress system of the building, explain, on a step-by-step basis, how the crowd manager on duty will complete the evacuation, and explain how the crowd manager will direct the occupants to safety in the event of one or more blocked exits.

#### (Add) 12.4.7.2.1

Any Special Amusement Building Concentrated Occupancy Place of Assembly, as outlined in 3.3.152.2.2, with a posted maximum occupancy of less than 150 people, shall not required to install the sprinkler coverage outlined in 12.4.7.1.

# (Amd) 12.6 Means of Egress Inspection.

#### (Add) 12.6.1

The building owner or agent shall inspect the means of egress to ensure it is maintained free of obstructions, and correct any deficiencies found, prior to each opening of the building to the public.

# (Add) 12.6.2

In places of assembly which have scheduled activities for recreational, educational, political, fraternal, social, or amusement purposes, the owner or management must inspect every exit from the building not more than ninety (90) minutes prior to the beginning of any meeting, concert, etc. If the inspection reveals blocked exits, the scheduled presentation must not begin until the exits are cleared and made easily accessible, assuring the safety and welfare of the patrons.

## (Add) 12.6.3

The building owner or agent shall prepare and maintain records of the date and time of each inspection on approved forms, listing any deficiencies found and actions taken to correct them.

# (Add) 12.7.2.1

The use of pyrotechnic devices, outlined in 12.7.2, shall be limited to the places of assembly with occupancy loads in excess of 1000 persons and to those places of assembly, that are theaters, with occupancy loads of greater than 300 but less than 1001. All such places of assembly must be fully sprinkled and further protected by a municipally connected fire alarm system.

# (Amd) 12.7.5 Crowd Management

#### (Amd) 12.7.5.2

The crowd manager shall receive appropriate training in emergency planning and basic crowd control techniques, by the state fire marshal, or his or her designee, on or before October 1, 2004.

# (Add) 12.7.5.2.1

The crowd manager(s) identified in 12.7.5.1 shall be in addition to the detail fire fighter(s) identified in 12.7.5.4 through 12.7.5.10.

## (Add) 12.7.5.3

**Admissions supervised.** Admissions to all places of assembly shall be supervised by the responsible management or by the person or persons delegated with the responsibility by the management, and the responsible person shall not allow admissions in excess of the maximum occupancy posted by the State Fire Marshal or his or her designee.

#### (Add) 12.7.5.4

All places of assembly with an occupancy load of greater than 1000 people shall have a uniformed fire fighter, and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department.

# (Add) 12.7.5.5

All places of assembly, of less concentrated use, with an occupancy load of greater than 300 people, but less than 1001 people, shall have a uniformed fire fighter and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department.

### (Add) 12.7.5.6

All places of assembly, of concentrated use, with an occupancy load of greater than 50 people, but less than 1001 people shall have a uniformed fire fighter and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department except as provided under 12.7.5.7.

# (Add) 12.7.5.7

All places of assembly, of concentrated or less concentrated use, with an occupancy load of greater than 50 people, but less than 1001 people, being utilized for activities that could potentially cause the place of assembly to be unsafe, dangerous or hazardous shall have one uniformed fire fighter on duty during such activity and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department unless this requirement is specifically waived in writing for each such event.

### (Add) 12.7.5.8

The cost of all fire fighters on duty under 12.7.5.4 through 12.7.5.7 shall be borne by the management of the facility.

# (Add) 12.7.5.9

Fire fighter(s) assigned a detail pursuant to 12.7.5.4 through 12.7.5.7 shall be equipped with portable communication devices which shall be provided by the local fire department to allow direct communication to the dispatcher of the local fire department.

# (Add) 12.7.5.10

The provisions of R.I.G.L. 23-28.2-17 shall apply to any fire fighter assigned a detail, to a place of assembly, pursuant to 12.7.5.4 through 12.7.5.7.

# CHAPTER 13 EXISTING ASSEMBLY OCCUPANCIES

Special Amusement Building Concentrated Occupancy Place of Assembly.

#### (Amd) 13.2.5.4.1

Festival seating, as defined in 3.3.188.1, shall be prohibited within a building, unless otherwise permitted by the following:

- (1) Festival seating shall be permitted in assembly occupancies having occupant loads of 250 or less.
- (2) Festival seating shall be permitted in assembly occupancies where occupant loads exceed 250 and an approved life safety evaluation has been performed. (See 13.4.1)

#### (Amd) 13.3.4.1

All assembly occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

### (Amd) 13.3.5.1

All existing places of assembly shall be completely protected by an approved system of automatic sprinklers installed and maintained in accordance with NFPA Standard 13, 2002 edition, and its related standards pursuant to the schedule outlined in section 13.3.5.1.1.

# (Add) 13.3.5.1.1

All places of assembly with occupancy loads of more than 300 shall be completely protected by an approved system of automatic sprinklers, installed and maintained in accordance with NFPA Standard 13, 2002 edition, and its related standards, on or before July 1, 2005.

All places of assembly with occupancy loads of 300 or less shall be completely protected by an approved system of automatic sprinklers, installed and maintained in accordance with NFPA Standard 13, 2002 edition, and its related standards, on or before July 1, 2006.

### (Add) 13.3.5.2.1

The requirements of 13.3.5.1 and 13.3.5.1.1 shall also not apply to the following:

- (1) Any place of assembly of less concentrated use, with an occupancy of 300 or fewer people, calculated at 15 square feet per person. (The above fifteen square feet (15 sq. ft.) per person calculation shall be exclusive of any separately calculated limited incidental spaces designated as a waiting area by the AHJ. The above fifteen square feet (15 sq. ft.) per person calculation shall also not apply buildings, containing separately calculated booths or similar fixed seating, determined not to be concentrated occupancies by the AHJ.)
- (2) Any place of assembly of concentrated use, with an occupancy of 300 or fewer people, not meeting the definition of a *Special Amusement Building Concentrated Occupancy Place of Assembly* as outlined in 3.3.152.2.2.
- (3) Any place of assembly of concentrated use, meeting the definition of a *Special Amusement Building Concentrated Occupancy Place of Assembly*, as outlined in 3.3.152.2.2, with a posted maximum occupancy of less than 150 people.
- (4) Any existing fully alarmed building used exclusively as a place of worship. (This exemption shall include places of worship with incidental business offices, religious education programs, and other programs designed watch children during the limited period of time that their parents or guardians attend religious services in the building. It shall also include the temporary programs outlined in chapter 27 of this Code until July 1, 2006. This exemption shall not include places of worship maintaining such licensed activities as child day care and Bingo. Permission for limited one time or annual events may be sought from the Fire Safety Code Board of Appeal & Review.)

#### (Add) 13.3.5.4

Any place of assembly, not required to be sprinkled, shall, on or before July 1, 2006, render all furniture, decorative and acoustical materials, floors, walls, ceilings and their coverings flame resistant, by the application of fire retardant materials approved by the Fire Safety Code Board of Appeal & Review.

# (Add) 13.3.5.5.1

The requirements of 13.3.5.4 shall not apply to a place of assembly that voluntarily installs approved sprinklers, in accordance with 9.7.1.1, on or before July 1, 2006.

# (Add) 13.3.5.5

The occupancy of any place of assembly without a fire alarm system and/or sprinkler system after July 1, 2004, shall have its maximum occupancy adjusted by minus ten percent (10%) for the absence of a fire alarm system and minus twenty (20%) for the absence of a sprinkler system, when sprinklers are required by law or regulation. Such downward adjustment in occupancy shall be cumulative and shall cease to apply when the premises are in compliance with the requirements for fire alarm systems and sprinklers, and shall not affect any other requirements of this Code, or the Fire Safety Code Board of Appeal and Review, applicable to the premises.

#### (Add) 13.3.5.5.1

A place of assembly, with an occupancy of between one hundred fifty (150) and three hundred (300) people, may avoid the requirements of section 13.3.5.5 by requiring a fire fighter on duty, as outlined in section 13.7.5.9, during all hours of occupancy. However, the occupancy readjustment with the required firefighter shall not alter the July 1, 2006 deadline for the installation of sprinklers.

# (Add) 13.4.7.1.1

All *Special Amusement Building Concentrated Occupancy Places of Assembly*, as defined in 3.3.152.2.2, shall comply with the requirements of 13.4.7.2 through 13.4.7.8 and shall be inspected annually by the AHJ.

## (Add) 13.4.7.1.2

Each stage area, within *Special Amusement Building Concentrated Occupancy Place of Assembly*, shall be provided with, and maintain, two fire extinguishers approved by the Fire Safety Code Board of Appeal & Review.

# (Add) 13.4.7.1.3

The responsible management of each *Special Amusement Building Concentrated Occupancy Place of Assembly*, shall provide an audible announcement of the location of emergency exits prior to each act or set.

#### (Add) 13.4.7.1.4

The responsible management of each *Special Amusement Building Concentrated Occupancy Place of Assembly*, shall have an emergency plan for the rapid evacuation of the premises approved by the state fire marshal. The plan shall identify the egress system of the building, explain, on a step-by-step basis, how the crowd manager on duty will complete the evacuation, and explain how the crowd manager will direct the occupants to safety in the event of one or more blocked exits.

### (Add) 13.4.7.2.1

Any Special Amusement Building Concentrated Occupancy Place of Assembly, as outlined in 3.3.152.2.2, with a posted maximum occupancy of less than 150 people, shall not required to install the sprinkler coverage outlined in 13.4.7.1.

# (Amd) 13.6 Means of Egress Inspection.

### (Add) 13.6.1

The building owner or agent shall inspect the means of egress to ensure it is maintained free of obstructions, and correct any deficiencies found, prior to each opening of the building to the public.

### (Add) 13.6.2

In places of assembly which have scheduled activities for recreational, educational, political, fraternal, social, or amusement purposes, the owner or management must inspect every exit from the building not more than ninety (90) minutes prior to the beginning of any meeting, concert, etc. If the inspection reveals blocked exits, the scheduled presentation must not begin until the exits are cleared and made easily accessible, assuring the safety and welfare of the patrons.

# (Add) 13.6.3

The building owner or agent shall prepare and maintain records of the date and time of each inspection on approved forms, listing any deficiencies found and actions taken to correct them.

# (Add) 13.7.2.1

The use of open flame devices or pyrotechnic devices, outlined in 12.7.2, shall be limited to the places of assembly with occupancy loads in excess of 1000 persons and to those places of assembly, that are theaters, with occupancy loads of greater than 300 but less than 1001. All such places of assembly must be fully sprinkled and further protected by a municipally connected fire alarm system.

# (Amd) 13.7.5 Crowd Management

#### (Amd) 13.7.5.2

The crowd manager shall receive appropriate training in emergency planning and basic crowd control techniques, by the state fire marshal, or his or her designee, on or before October 1, 2004.

#### (Add) 13.7.5.2.1

The crowd manager(s) identified in 12.7.5.1 shall be in addition to the detail fire fighter(s) identified in 12.7.5.4 through 12.7.5.10.

#### (Add) 13.7.5.3

**Admissions supervised.** Admissions to all places of assembly shall be supervised by the responsible management or by the person or persons delegated with the responsibility by the management, and the responsible person shall not allow admissions in excess of the maximum occupancy posted by the State Fire Marshal or his or her designee.

### (Add) 13.7.5.4

All places of assembly with an occupancy load of greater than 1000 people shall have a uniformed fire fighter, and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department.

# (Add) 13.7.5.5

All places of assembly, of less concentrated use, with an occupancy load of greater than 300 people, but less than 1001 people, shall have a uniformed fire fighter and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department.

# (Add) 13.7.5.6

All places of assembly, of concentrated use, with an occupancy load of greater than 50 people, but less than 1001 people shall have a uniformed fire fighter and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department except as provided under 12.7.5.7.

#### (Add) 13.7.5.7

All places of assembly, of concentrated or less concentrated use, with an occupancy load of greater than 50 people, but less than 1001 people, being utilized for activities that could potentially cause the place of assembly to be unsafe, dangerous or hazardous shall have one uniformed fire fighter on duty during such activity and any additional uniformed fire fighters on duty when deemed necessary by the designee of the state fire marshal in the local fire department unless this requirement is specifically waived in writing for each such event.

#### (Add) 13.7.5.8

The cost of all fire fighters on duty under 12.7.5.4 through 12.7.5.7 shall be borne by the management of the facility.

#### (Add) 13.7.5.9

Fire fighter(s) assigned a detail pursuant to 12.7.5.4 through 12.7.5.7 shall be equipped with portable communication devices which shall be provided by the local fire department to allow direct communication to the dispatcher of the local fire department.

#### (Add) 13.7.5.10

he provisions of R.I.G.L. 23-28.2-17 shall apply to any fire fighter assigned a detail, to a place of assembly, pursuant to 12.7.5.4 through 12.7.5.7.

# CHAPTER 14 NEW EDUCATIONAL OCCUPANCIES

# (Amd) 14.3.4.1.1

Educational occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code,

# (Amd) 14.3.4.1.2

Exceptions to the above fire alarm requirements, if any, shall be listed in amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code,

# (Add) 14.3.4.4

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

(Add) 14.7.3.3 All new educational occupancies shall be inspected annually by the AHJ.

# CHAPTER 15 EXISTING EDUCATIONAL OCCUPANCIES

#### (Amd) 15.3.4.1.1

Educational occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code,.

### (Amd) 15.3.4.1.2

Exceptions to the above fire alarm requirements, if any, shall be listed in amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code,.

# (Add) 15.3.4.4

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

#### (Add) 15.7.3.3

All existing educational occupancies shall be inspected annually by the AHJ.

# CHAPTER 16 NEW DAY-CARE OCCUPANCIES

#### (Amd) 16.3.4.1. General.

Day-care occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

### (Add) 16.3.4.1.1

Exceptions to the above fire alarm requirements, if any, shall be listed in amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Add) 16.3.4.1.2.

**Smoke and Carbon Monoxide Alarms.** In addition, every child day-care occupancy shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72 and NFPA 720.

# (Add) 16.3.4.6

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 17 EXISTING DAY-CARE OCCUPANCIES

# (Amd) 17.3.4.1. General.

Day-care occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code,. Any day-care occupancy, not previously required to install such an alarm system, shall have the above system installed and approved on or before July 1, 2005.

#### (Add) 17.3.4.1.1

Exceptions to the above fire alarm requirements, if any, shall be listed in amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code,.

#### (Add) 17.3.4.1.2.

**Smoke and Carbon Monoxide Alarms.** In addition, every child day-care occupancy shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72 and NFPA 720. Any day-care occupancy, not previously required to install such alarms, shall have the above alarms installed and approved on or before July 1, 2005.

### (Add) 17.3.4.6

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 18 NEW HEALTH CARE OCCUPANCIES

# (Amd) 18.3.4.1

**General.** Health care occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code..

## (Add) 18.3.4.6

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 19 EXISTING HEALTH CARE OCCUPANCIES

# (Amd) 19.3.4.1

**General.** Health care occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code..

# (Add) 19.3.4.6

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 20 NEW AMBULATORY HEALTH CARE OCCUPANCIES

#### (Amd) 20.3.4.1.

**General.** Ambulatory health care facilities shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 20.3.4.2 through 20.3.4.5.

# (Add) 20.3.4.6

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 21 EXISTING AMBULATORY HEALTH CARE OCCUPANCIES

# (Amd) 21.3.4.1.

**General.** Ambulatory health care facilities shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 21.3.4.2 through 21.3.4.5.

## (Add) 21.3.4.6

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 22 NEW DETENTION AND CORRECTIONAL OCCUPANCIES

### (Amd) 22.3.4.1.1

Detention and correctional occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 22.3.4.1.3 through 22.3.4.4.3.

### (Add) 22.3.4.5

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 23 EXISTING DETENTION AND CORRECTIONAL OCCUPANCIES

#### (Amd) 23.3.4.1.1

Detention and correctional occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 23.3.4.1.3 through 23.3.4.4.4.

#### (Add) 23.3.4.5

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 24 ONE- AND TWO-FAMILY DWELLINGS

# (Delete) 24.1 through 24.5.1.2

Sections 24.1 through 24.5.1.2 of Chapter 24 are hereby deleted and replaced with the following sections:

# (Add) 24.1

Compliance with State Building and Minimum Housing Codes.

# (Add) 24.1.1

All one and two family dwellings shall remain subject to, and comply with, the State Building Code adopted pursuant to RIGL 23-27.3 et seq.

#### (Add) 24.1.2

All one and two family dwellings shall further remain subject to, and comply with the Minimum Housing Standards outlined in RIGL 45-24.2-1 et seq.

# (Add) 24.2

Installation of Smoke and Carbon Monoxide Alarms-New and converted buildings.

# (Add) 24.2.1

All buildings hereinafter constructed or converted for residential occupancy, including mobile and modular homes, shall be provided with smoke and carbon monoxide detectors, installed in accordance with NFPA 72, and NFPA 720, 2003 edition, at the direction and to the satisfaction of the AHJ.

#### (Add) 24.2.1.1

The above smoke and carbon monoxide detectors may be installed as either separate or combination units approved by the AHJ.

#### (Add) 24.2.1.2

The above smoke and carbon monoxide detectors may be either hardwired or wireless units approved by the AHJ.

### (Add) 24.2.1.3

The local fire authorities certified by the State Fire Marshal as prescribed in RIGL 23-28.2.6, in cooperation with the local building code officials, shall enforce the provisions of this chapter.

# (Add) 24.2.1.4

Compliance with the above provisions shall be considered a prerequisite to the approval, by the fire authority, of any certificate of occupancy issued by the building official pursuant to RIGL 23-27.3-120.

### (Add) 24.2.1.5

It shall be the responsibility of the owner to maintain in operable condition smoke and carbon monoxide detection systems, installed as required pursuant to this chapter, and the owner shall make operable, within seven (7) days after being notified by certified mail by the occupant and/or enforcement official, any inoperable system.

# (Add) 24.2.1.5.1

If the owner fails to make the system operable within the required seven (7) days, the tenant may cause the system to be made operable if the reasonable total reasonable cost of making the repairs does not exceed the sum of twenty dollars (\$20.00), and the tenant may deduct from his or her rent the actual reasonable cost of repairs not to exceed twenty (\$20.00).

### (Add) 24.2.1.5.2

The payment of the reasonable costs, outlined in section 24.2.1.5.1, shall not exempt the owner from the payment of fines for violation of this Code as outlined in RIGL 23-28.3-9.

### (Add) 24.3 Installation of Smoke and Carbon Monoxide Alarms-Existing Buildings

# (Add) 24.3.1

All occupied residential properties, including mobile homes, shall, at the responsibility of the seller before title to the property is transferred, be provided with smoke and carbon monoxide detectors, installed in accordance with NFPA 72, and NFPA 720, 2003 edition, at the direction and to the satisfaction of the AHJ.

# (Add) 24.3.1.1

The above smoke and carbon monoxide detectors may be installed as either separate or combination units approved by the AHJ.

# (Add) 24.3.1.2

The above smoke and carbon monoxide detectors may be either battery operated, hardwired or wireless units approved by the AHJ.

#### (Add) 24.3.1.3

The local fire authorities shall enforce the provisions of this chapter. The State Fire Marshal's Office may enforce the provisions of this chapter when so requested to by the local authority or when the local authority is either unwilling or unable to fulfill its obligations under this chapter.

# (Add) 24.3.1.3.1

The local fire authority that performs smoke and carbon monoxide detector inspections in all residential occupancies shall, at the time of the inspection, be allowed to charge a thirty dollar (\$30.00) fee for the inspection of any residential occupancy. The responsibility of this charged fee will be borne by the seller on each occurrence before title to the property is transferred. A thirty dollar (\$30.00) fee will be allowed for any subsequent re-inspection of the same residential occupancy due to improper installation, wrong location, improper wiring method, or the seller's failure to maintain a mutually agreed upon appointment with the local fire authority that

performs the inspection function. The fees collected by the local fire authority shall be used for fire prevention purposes in that particular city, town, fire district, or other municipal subdivision.

# (Add) 24.3.1.4

At the time of the transfer of title, the seller must provide the purchaser with a certificate from the fire department for the community in which the dwelling is located stating that the smoke and carbon monoxide detector systems have been inspected within sixty (60) days prior to the date of sale and has been determined to be in good working order. The fire department for the community in which the dwelling is located must inspect the smoke and carbon monoxide detector systems of the dwelling within ten (10) days of a request from the owner. The inspection may be conducted by qualified personnel of the department or the State Fire Marshal's Office. No fire department nor the State Fire Marshal shall be liable for any damage caused by the subsequent malfunction of a smoke detection system or carbon monoxide detector system which it inspected.

# (Add) 24.3.1.4.1

Transfers of real property are exempt from compliance with the provisions of sections 24.2.2 through 24.2.2.7 if:

- (1) The property being transferred does not contain residential dwellings;
- (2) Within the past six months a certificate of use or occupancy has been issued, in accordance with section 24.2.1.4, for the property being transferred;
- (3) The property being transferred currently maintains the smoke and carbon monoxide detection systems in accordance with this chapter;
- (4) The property being transferred is uninhabitable without the issuance of a certificate of use and occupancy referenced in section 24.2.1.4;
- (5) The property is being transferred pursuant to a foreclosure sale, a tax sale, as a redemption of a tax sale, or in lieu of foreclosure, and provided further that the requirements of this chapter 24 shall met prior to the re-occupancy of the property;
- (6) The property is being transferred by operation of law, or pursuant to an order of any United States court, or any superior or family court of the State of Rhode Island, and provided further that such court order specifically directs non-compliance with this chapter 24; or
- (7) The property is being acquired by the state for demolition and will not be sold or used by the state for residential purposes.

# (Add) 24.3.1.5

It shall be the responsibility of the owner to maintain in operable condition smoke and carbon monoxide detection systems, installed as required pursuant to this chapter, and the owner shall make operable, within seven (7) days after being notified by certified mail by the occupant and/or enforcement official, any inoperable system.

# (Add) 24.3.1.5.1

If the owner fails to make the system operable within the required seven (7) days, the tenant may cause the system to be made operable if the reasonable total reasonable cost of making the

repairs does not exceed the sum of twenty dollars (\$20.00), and the tenant may deduct from his or her rent the actual reasonable cost of repairs not to exceed twenty (\$20.00).

# (Add) 24.3.1.6

Owners of existing residential properties, previously required to install smoke detectors, shall maintain those detectors in good operating condition.

# (Add) 24.3.1.7

Owners of existing residential properties, previously required to install smoke detectors, shall not be required to immediately install the carbon monoxide detectors. However, full compliance with section 24.2.2 through 24.2.2.7 shall be required with the next transfer of title.

# CHAPTER 25 Three Family Apartment Building.

### (Add) 25.1

Compliance with State Building and Minimum Housing Codes.

# (Add) 25.1.1

All three family apartment buildings shall remain subject to, and comply with, the State Building Code adopted pursuant to RIGL 23-27.3 et seq.

# (Add) 25.1.2

All three family apartment buildings shall further remain subject to, and comply with the Minimum Housing Standards outlined in RIGL 45-24.2-1 et seq.

# (Add) 25.2 Installation of Smoke and Carbon Monoxide Alarms.

#### (Add) 25.2.1

All three family apartment buildings hereinafter constructed or converted for residential occupancy, including modular homes, shall be provided with smoke and carbon monoxide detectors, installed in accordance with NFPA 72, and NFPA 720, 2003 edition, at the direction and to the satisfaction of the AHJ.

# (Add) 25.2.1.1

The above smoke and carbon monoxide detectors may be installed as either separate or combination units approved by the AHJ.

# (Add) 25.2.1.2

The above smoke and carbon monoxide detectors may be either hardwired or wireless units approved by the AHJ.

# (Add) 25.2.1.3

The local fire authorities certified by the State Fire Marshal as prescribed in RIGL 23-28.2.6, in cooperation with the local building code officials, shall enforce the provisions of this chapter.

# (Add) 25.2.1.4

Compliance with the above provisions shall be considered a prerequisite to the approval, by the fire authority, of any certificate of occupancy issued by the building official pursuant to RIGL 23-273-120.

# (Add) 25.2.1.5

It shall be the responsibility of the owner to maintain in operable condition smoke and carbon monoxide detection systems, installed as required pursuant to this chapter, and the owner shall make operable, within seven (7) days after being notified by certified mail by the occupant and/or enforcement official, any inoperable system.

# (Add) 25.2.1.5.1

If the owner fails to make the system operable within the required seven (7) days, the tenant may cause the system to be made operable if the reasonable total reasonable cost of making the repairs does not exceed the sum of twenty dollars (\$20.00), and the tenant may deduct from his or her rent the actual reasonable cost of repairs not to exceed twenty (\$20.00).

# (Add) 25.2.1.5.2

The payment of the reasonable costs, outlined in section 25.2.1.5.1, shall not exempt the owner from the payment of fines for violation of this Code as outlined in RIGL 23-28.3-9.

# (Add) 25.2.2

On and after July 1, 2008, all three family apartment buildings, shall, at the responsibility of the owner, be provided with smoke and carbon monoxide detectors, installed in accordance with NFPA 72, and NFPA 720, 2003 edition, at the direction and to the satisfaction of the AHJ. Prior to July 1, 2008, all three family apartment buildings, shall, at the responsibility of the seller before title to the property is transferred, be provided with smoke and carbon monoxide detectors, installed in accordance with NFPA 72, and NFPA 720, 2003 edition, at the direction and to the satisfaction of the AHJ.

#### (Add) 25.2.2.1

The above smoke and carbon monoxide detectors may be installed as either separate or combination units approved by the AHJ.

#### (Add) 25.2.2.2

Prior to July 1, 2008, the above smoke and carbon monoxide detectors may be either battery operated, hardwired or wireless units approved by the AHJ. On and after July 1, 2008, The above smoke and carbon monoxide detectors shall be hardwired or wireless units approved by the AHJ.

#### (Add) 25.2.2.3

The local fire authorities shall enforce the provisions of this chapter. The State Fire Marshal's Office may enforce the provisions of this chapter when so requested to by the local authority or when the local authority is either unwilling or unable to fulfill its obligations under this chapter.

#### (Add) 25.2.2.3.1

The local fire authority that performs smoke and carbon monoxide detector inspections in all residential occupancies shall, at the time of the inspection, be allowed to charge a thirty dollar (\$30.00) fee for the inspection of any residential occupancy. The responsibility of this charged fee will be borne by the seller on each occurrence before title to the property is transferred. A thirty dollar (\$30.00) fee will be allowed for any subsequent re-inspection of the same residential occupancy due to improper installation, wrong location, improper wiring method, or the seller's failure to maintain a mutually agreed upon appointment with the local fire authority that performs the inspection function. The fees collected by the local fire authority shall be used for fire prevention purposes in that particular city, town, fire district, or other municipal subdivision.

# (Add) 25.2.2.4

At the time of the transfer of title, the seller must provide the purchaser with a certificate from the fire department for the community in which the dwelling is located stating that the smoke and carbon monoxide detector systems have been inspected within sixty (60) days prior to the date of sale and has been determined to be in good working order. The fire department for the community in which the dwelling is located must inspect the smoke and carbon monoxide detector systems of the dwelling within ten (10) days of a request from the owner. The inspection may be conducted by qualified personnel of the department or the State Fire Marshal's Office. No fire department nor the State Fire Marshal shall be liable for any damage caused by the subsequent malfunction of a smoke detection system or carbon monoxide detector system which it inspected.

(Add) 25.2.2.4.1 Transfers of real property are exempt from compliance with the provisions of sections 25.2.2 through 25.2.2.7 if:

- (1) The property being transferred does not contain residential dwellings;
- (2) Within the past six months a certificate of use or occupancy has been issued, in accordance with section 25.2.1.4, for the property being transferred;
- (3) The property being transferred currently maintains the smoke and carbon monoxide detection systems in accordance with this chapter;
- (4) The property being transferred is uninhabitable without the issuance of a certificate of use and occupancy referenced in section 25.2.1.4;
- (5) The property is being transferred pursuant to a foreclosure sale, a tax sale, as a redemption of a tax sale, or in lieu of foreclosure, and provided further that the requirements of this chapter 25 shall met prior to the re-occupancy of the property;
- (6) The property is being transferred by operation of law, or pursuant to an order of any United States court, or any superior or family court of the State of Rhode Island, and provided further that such court order specifically directs non-compliance with this chapter 25; or
- (7) The property is being acquired by the state for demolition and will not be sold or used by the state for residential purposes.

#### (Add) 25.2.2.5

It shall be the responsibility of the owner to maintain in operable condition smoke and carbon monoxide detection systems, installed as required pursuant to this chapter, and the owner shall

make operable, within seven (7) days after being notified by certified mail by the occupant and/or enforcement official, any inoperable system.

# (Add) 25.2.2.5.1

If the owner fails to make the system operable within the required seven (7) days, the tenant may cause the system to be made operable if the reasonable total reasonable cost of making the repairs does not exceed the sum of twenty dollars (\$20.00), and the tenant may deduct from his or her rent the actual reasonable cost of repairs not to exceed twenty (\$20.00).

# (Add) 25.2.2.6

Owners of existing residential properties, previously required to install smoke detectors, shall maintain those detectors in good operating condition.

# (Add) 25.2.2.7

Owners of existing residential properties, previously required to install smoke detectors, shall not be required to immediately install the carbon monoxide detectors. However, full compliance with section 25.2.2 through 25.2.2.7 shall be required with the next transfer of title.

# CHAPTER 26 LODGING OR ROOMING HOUSES

# (Add) 26.3.5.3.7

Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.

# (Amd) 26.3.3.5. Detection, Alarm, and Communications Systems.

# (Amd) 26.3.3.5.1. General.

Lodging or Rooming House occupancies shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code. Any lodging or rooming house occupancy, not previously required to install such an alarm system, shall have the above system installed and approved on or before July 1, 2005.

#### (Amd) 26.3.3.5.2. Smoke and Carbon Monoxide Alarms.

In addition, every Lodging or Rooming House shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition, in every guest room and every living area and sleeping room within a guest suite. Any lodging or rooming house occupancy, not previously required to install such alarms, shall have the above alarms installed and approved on or before July 1, 2005.

#### (Amd) 26.3.3.5.3

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be

resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# (Amd) 26.3.5.1.

All new lodging or rooming houses shall be protected throughout by an approved automatic sprinkler system in accordance with 26.3.5.3.

# (Amd) 26.3.5.2.

Every existing lodging or rooming house built, or converted to this occupancy, on or after June 29, 1990, shall be protected throughout by an approved automatic sprinkler system in accordance with 26.3.5.3.

#### (Add) 26.3.5.4

Portable fire extinguishers shall be provided in accordance with section 9.7.4.1 of this Code.

# CHAPTER 27 Emergency Shelter Occupancy.

# (Add) 27.1 General Requirements.

# (Add) 27.1.1 Application.

#### (Add) 27.1.1.1

The requirements of this chapter shall apply to buildings that provide temporary emergency sleeping space for 16 or fewer persons. The intent of this chapter is to allow a phased upgrading of emergency shelter occupancies to the provisions of Chapter 26 while allowing this essential service to continue in full operation during the interim period. The provisions of this chapter shall remain effective until July 1, 2006 at which time such facilities shall be brought into compliance with the provisions of Chapter 26 of this Code.

#### (Add) 27.1.1.2

Places of worship, maintaining this temporary occupancy in accordance with the provisions of this chapter, shall not lose their exception from the requirements of sections 13.3.5.1 and 13.3.5.1.1 as outlined in section 13.3.5.2.1 (4) of this Code.

#### (Add) 27.1.1.2.1

Places of worship, wishing to maintain this emergency shelter occupancy, and their exception to the requirements of sections 13.3.5.1 and 13.3.5.1.1, on and after July 1, 2006, shall either comply with the provisions of Chapter 26 of this Code or comply with an alternative plan for fire safety approved by the Fire Safety Code Board of Appeal & Review.

#### (Add) 27.1.1.3

For buildings with larger occupancies, the requirements of Chapters 28 and 29 are applicable. The owners of such facilities may seek interim relief from specific requirements from the Fire Safety Code Board of Appeal & Review.

# (Add) 27.1.1.4

All emergency shelter occupancies shall be located on the on the first floor or on the level of exit discharge unless specifically authorized by the AHJ to be located on a lower level.

# (Add) 27.2 Means of Escape Requirements

# (Add) 27.2.1

There shall be at least two (2) clearly defined means of escape to grade from the space used as an emergency shelter.

#### (Add) 27.2.2

The means of escape, stairways and doors shall comply with the provisions of sections 26.2.1.1.1 through 26.2.3.6 of this Code.

# (Add) 27.2.3

The means of escape shall be further protected with emergency lightingand exit signs approved by the AHJ.

#### (Add) 27.3 Protection.

# (Add) 27.3.1 Smoke and Carbon Monoxide Detection

#### (Add) 27.3.1.1

Smoke alarms and carbon monoxide detection shall be immediately provided and maintained in accordance with the provisions of section 26.3.3.5.2. On or before July 1, 2005, all such facilities shall also be in compliance with section 26.3.3.5.1 of this Code.

# (Add) 27.3.2 Supervision

#### (Add) 27.3.2.1

At least one responsible adult, approved by the AHJ and not a resident of the emergency shelter occupancy, shall maintain a fire watch during all hours of occupancy of the emergency shelter facility.

#### (Add) 27.3.2.1.1

In shelters used to temporarily house families, a responsible adult member of each such family may be approved by the AHJ to maintain the fire watch referenced in 27.3.2.1.

#### (Add) 27.3.2.2

The responsible adult(s) must be trained in fire prevention techniques, fire department notification, evacuation procedures and fire extinguisher operation by the AHJ prior to being approved to oversee the fire watch.

# (Add) 27.3.2.3

The owner or management of the shelter shall provide the AHJ with a schedule listing the names of the responsible adults conducting the fire watch and the times to which they have been assigned this duty.

# (Add) 27.3.2.4

A fire fighter on duty, as defined in sections 12.7.5.9 and 13.7.5.9 may be substituted for the responsible adult at the discretion of the owner or management of the emergency shelter facility.

#### (Add) 27.3.3 Protection from Hazards.

#### (Add) 27.3.3.1

No smoking shall be allowed in any building utilized as an emergency shelter facility during any and all periods of this occupancy.

# (Add) 27.3.3.2

No cooking shall be allowed in any building utilized as an emergency shelter facility during any and all periods of overnight occupancy. If specifically authorized by the AHJ, cooking, with the appropriate temporary safeguards required by the AHJ, may be allowed during limited periods when the occupants are all awake and fully capable of self preservation.

# (Add) 27.3.3 Fire Extinguishers.

# (Add) 27.3.3.1

A minimum of two fire extinguishers, installed at the direction and to the satisfaction of the AHJ, shall be provided in every emergency shelter facility in accordance with section 9.7.4.1 of this Code.

# CHAPTER 28 NEW HOTELS AND DORMITORIES

#### (Add) 28.3.2.2.4

Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.

#### (Amd) 28.3.4.1. General.

Every hotel and/or dormitory shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 28.3.4.2 through 28.3.4.5.

# (Amd) 28.3.4.5. Smoke and Carbon Monoxide Alarms.

In addition, every hotel and/or dormitory shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition, in every guest room and every living area and sleeping room within a guest suite.

# (Amd) 28.3.4.6.

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# (Amd) 28.3.5.1.

All new hotel and/or dormitory occupancies shall be protected throughout by approved automatic sprinkler systems in accordance with 28.3.5.3.

# (Amd) 28.3.5.2.

Every hotel and/or dormitory occupancy, every addition hereafter made to a hotel and/or dormitory, and every building hereafter converted for the purposes of a hotel and/or dormitory shall be completely protected by an approved system of automatic sprinklers installed and maintained in accordance with 28.3.5.3.

# (Amd) 28.3.5.7

Portable fire extinguishers shall be provided in all new hotel occupancies in accordance with section 9.7.4.1 of this Code.

# CHAPTER 29 EXISTING HOTELS AND DORMITORIES

#### (Add) 29.3.2.2.4

Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.

#### (Amd) 29.3.4.1. General.

Every Hotel and/or Dormitory shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 28.3.4.2 through 28.3.4.5. Any existing hotel and/or dormitory occupancy, not previously required to install such an alarm system, shall have the above system installed and approved on or before July 1, 2005.

# (Amd) 29.3.4.5. Smoke and Carbon Monoxide Alarms.

In addition, every existing hotel and/or dormitory shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition, in every guest room and every living area and sleeping room within a guest suite. Any hotel and/or dormitory occupancy, not previously required to install such alarms, shall have the above alarms installed and approved on or before July 1, 2005.

# (Amd) 29.3.4.5.3.

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# (Amd) 29.3.5.2.

Every existing hotel and/or dormitory occupancy built, or converted to this occupancy, on or after June 29, 1990, and all existing hotels and/or dormitories constructed wholly or in part of combustible materials, which have sleeping accommodations for guests or employees above the third story, shall be protected throughout by an approved automatic sprinkler system in accordance with 29.3.5.3.

#### (Amd) 29.3.5.7

Portable fire extinguishers shall be provided in all existing hotel occupancies in accordance with section 9.7.4.1 of this Code.

# CHAPTER 30 NEW APARTMENT BUILDINGS

#### (Add) 30.3.2.1.3

Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.

#### (Amd) 30.3.4.1.1 General.

Every apartment building, other then those meeting 30.3.4.1.2, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 30.3.4.2 through 30.3.4.5.2

# (Amd) 30.3.4.1.2

A fire alarm system shall not be required in buildings where each dwelling unit is completely separated from other contiguous dwelling units by fire barriers (see Section 8.3) having a fire resistance rating of not less than 1 hour, and where each dwelling unit has either its own independent exit or its own independent stairway or ramp discharging at grade. However, such exempted buildings shall fully comply with the provisions for smoke and carbon monoxide alarms in accordance with Section 30.3.4.5.1

#### (Amd) 30.3.4.1.3

Apartment buildings containing more than three (3) and less than (8) living units, between fire barriers (see Section 8.3) having a fire resistance rating of not less than two (2) hours, shall have a local fire alarm system capable of immediately notifying all of the residents of the facility of fire or other emergency.

#### (Add) 30.3.4.1.4

Apartment buildings containing eight (8) or more living units, without approved fire barriers, as outlined in 31.3.4.1.3, shall have a municipally connected fire alarm system capable of immediately notifying all of the residents of the facility and the municipal fire department of fire or other emergency in accordance with 9.6.4.2 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Add) 30.3.4.1.5

Apartment buildings meeting the definition of a *High-Rise Building* as defined in 3.3.27.7 shall further comply with the detection, alarm and communication systems requirements outlined in 11.8.3.

#### (Amd) 30.3.4.5.1. Smoke and Carbon Monoxide Alarms.

In addition, every apartment building shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition.

# (Amd) 30.3.4.6.

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

#### (Amd) 30.3.5.1.

All new apartment buildings, every addition hereafter made to an apartment building, and every building hereafter converted for the purposes of an apartment building, which are either more than three (3) stories in height above the basement or contain more than six (6) living units between approved fire barriers (see Section 8.3) having a fire resistance rating of not less than two (2) hours, shall be protected throughout by approved automatic sprinkler systems in accordance with 30.3.5.3.

#### (Amd) 30.3.5.2.

In buildings protected throughout by an approved automatic sprinkler system in accordance with 30.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

#### (Amd) 30.3.5.11

Portable fire extinguishers shall be provided in all new apartment occupancies in accordance with section 9.7.4.1 of this Code.

#### (Amd) 30.3.5.11.1

As an alternative to the location requirements for portable fire extinguishers outlined in section 9.7.4.1 of this Code, the owner or management of a new apartment building may provide each apartment unit with an approved fire extinguisher installed at the direction and to the satisfaction of the AHJ.

# (Amd) 30.6

All new apartment buildings, used as housing for elderly or disabled people, shall be inspected annually by the AHJ.

# CHAPTER 31 EXISTING APARTMENT BUILDINGS

# (Add) 31.1.1.3 AHJ approved apartment buildings.

Any existing, fully alarmed apartment building, shall be deemed in compliance with the provisions of this Chapter 31, upon meeting the following fifteen requirements:

- (1) The building maintains a fire alarm system that complies with the provisions of Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, along with subsections 31-3.4.1.2 through 31.3.4.1.5 to the satisfaction of the state fire marshal, deputy state fire marshal and/or the assistant deputy state fire marshal (hereinafter the "AHJ"); and
- (2) The building maintains an approved system of either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition, or shall provide this detection, to the satisfaction of the AHJ, on or before July 1, 2005; and
- (3) The building maintains emergency lighting approved by the AHJ; and
- (4) The building maintains approved exit signage, if so required by the AHJ; and
- (5) The building shall have at least two means of egress of which one may be a properly maintained existing metal fire escape or platform and ladder system, approved by the AHJ.
- (6) The walls of the internal means of egress are made of plaster and/or sheetrock, are in good repair, and maintain an approximate fire rating of twenty (20) minutes as determined by the AHJ; and
- (7) All combustible covering materials, within the approved egress systems, such as existing paneling or wainscoting, mounted on approved plaster or sheetrock walls or ceilings, shall be rendered flame resistant by the application of an approved *Class A* flame-spread rated material to the satisfaction of the AHJ; and
- (8) The existing dimensions of the egress system appear to adequately support the rapid evacuation of the building, in the opinion of the AHJ.
- (9) The internal means of egress may contain winding stairs approved by the AHJ.

- (10) Approved solid core or steel doors, maintaining an approximate fire rating of twenty (20) minutes, have been installed in the existing egress system door jambs to the satisfaction of the AHJ; and
- (11) Existing metal fire escapes, platform and ladder systems, maintained in good repair, may be utilized as a second means of egress, as approved by the AHJ. The above existing fire escape systems may be accessed through windows providing a clear opening of at least 5.7 square feet, as approved by the AHJ. All locks and locking devices shall be permanently removed from the doors to the rooms providing access to the fire escape system; and
- (12)Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.
- (13) Any furnace, boiler or comparable central heating plant above 160,000 BTU input and all floor mounted units requiring a non-combustible floor by their listing, shall be either segregated from the remainder of the building by a one hour rated enclosure or protected by domestically-supplied sprinkler head(s) to the satisfaction of the AHJ.
- (14)Portable fire extinguishers shall be provided in accordance with section 9.7.4.1 of this Code. As an alternative to the location requirements for portable fire extinguishers outlined in section 9.7.4.1 of this Code, the owner or management of the apartment building may provide each apartment unit with an approved fire extinguisher installed at the direction and to the satisfaction of the AHJ.
- (15) Every existing apartment building, containing more than six (6) living units between approved fire barriers (see Section 8.3) having a fire resistance rating of not less than two (2) hours, built, or converted to this occupancy, on or after June 29, 1990, and all existing apartment buildings constructed wholly or in part of combustible materials, which have sleeping accommodations for guests or employees above the third story, shall, at a minimum, maintain an approved, engineered system of domestically supplied sprinkler heads covering the entire internal egress system with at least one additional head located inside the exit access door of each apartment. The above domestically supplied sprinkler coverage shall be installed to the satisfaction of the AHJ. The engineering of this limited coverage domestically supplied system of sprinkler heads shall comply with either section 9.7.1.2 of this Code or standards outlined in BOCA Standard 100 Life Safety Fire Sprinkler Code.

(The above alternative requirements are primarily designed to address the structural issues facing the owners of existing apartment buildings that were previously converted, to this occupancy, from older existing one, two and three family dwellings.)

#### (Add) 31.3.2.1.2

Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.

#### (Amd) 31.3.4.1.1 General.

Every existing apartment building, other then those meeting 31.3.4.1.2, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, except as modified by 31.3.4.2 through 31.3.4.5.2. Any existing apartment building, not previously required to install such alarms, shall have the above alarms installed and approved on or before July 1, 2005.

# (Amd) 31.3.4.1.2

A fire alarm system shall not be required in buildings where each dwelling unit is completely separated from other contiguous dwelling units by fire barriers (see Section 8.3) having a fire resistance rating of not less than 1 hour, and where each dwelling unit has either its own independent exit or its own independent stairway or ramp discharging at grade. However, such exempted buildings shall fully comply with the provisions for smoke and carbon monoxide alarms in accordance with Section 31.3.4.5.1

# (Add) 31.3.4.1.3

Apartment buildings containing more than three (3) and less than (8) living units, between fire barriers (see Section 8.3) having a fire resistance rating of not less than two (2) hours, shall have a local fire alarm system capable of immediately notifying all of the residents of the facility of fire or other emergency.

#### (Add) 31.3.4.1.4

Apartment buildings containing eight (8) or more living units, without approved fire barriers as outlined in 31.3.4.1.3, shall have a municipally connected fire alarm system capable of immediately notifying all of the residents of the facility and the municipal fire department of fire or other emergency in accordance with 9.6.4.2 and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Add) 31.3.4.1.5

Apartment buildings meeting the definition of a *High-Rise Building* as defined in 3.3.27.7 shall further comply with the detection, alarm and communication systems requirements outlined in 11.8.3.

# (Amd) 31.3.4.5.1. Smoke and Carbon Monoxide Alarms.

In addition, every apartment building shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition. Any existing apartment building, not previously required to install such alarms, shall have the above alarms installed and approved on or before July 1, 2005.

# (Amd) 31.3.4.6.

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be

resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# (Amd) 31.3.5.1.

Every existing apartment building, containing more than six (6) living units between approved fire barriers (see Section 8.3) having a fire resistance rating of not less than two (2) hours, built, or converted to this occupancy, on or after June 29, 1990, and all existing apartment buildings constructed wholly or in part of combustible materials, which have sleeping accommodations for guests or employees above the third story, shall be protected throughout by an approved automatic sprinkler system in accordance with 31.3.5.3.

# (Amd) 31.3.5.2.

In buildings protected throughout by an approved automatic sprinkler system in accordance with 31.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

#### Amd) 31.3.5.11

Portable fire extinguishers shall be provided in all existing apartment occupancies in accordance with section 9.7.4.1 of this Code.

# (Amd) 31.3.5.11.1

As an alternative to the location requirements for portable fire extinguishers outlined in section 9.7.4.1 of this Code, the owner or management of an existing apartment building may provide each apartment unit with an approved fire extinguisher installed at the direction and to the satisfaction of the AHJ.

# (Amd) 31.6

All existing apartment buildings, used as housing for elderly or disabled people, shall be inspected annually by the AHJ.

# CHAPTER 32 NEW RESIDENTIAL BOARD AND CARE OCCUPANCIES

#### (Amd) 32.2.3.4.1 Fire Alarm Systems.

Every new residential board and care occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Amd) 32.2.3.4.3.1 Smoke and Carbon Monoxide Alarms.

In addition, every new residential board and care occupancy shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition.

# (Amd) 32.2.3.5.1

All facilities shall be protected throughout by an approved, automatic sprinkler system installed in accordance with 32.2.3.5.3 using quick response or residential sprinklers.

# (Amd) 32.2.3.5.2.

In buildings protected throughout by an approved automatic sprinkler system in accordance with 31.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

# (Add) 32.3.3.2.2.1

Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.

# (Amd) 32.3.3.4.1 Fire Alarm Systems.

Every new residential board and care occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Add) 32.3.3.4.3.1 Smoke and Carbon Monoxide Alarms.

In addition, every new residential board and care occupancy shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition.

# (Amd) 32.3.3.5.1

All facilities shall be protected throughout by an approved, automatic sprinkler system installed in accordance with 32.2.3.5.3 using quick response or residential sprinklers.

#### (Add) 32.3.3.5.2.

In buildings protected throughout by an approved automatic sprinkler system in accordance with 31.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

# (Amd) 32.3.5

Portable fire extinguishers shall be provided in all new residential board and care occupancies in accordance with section 9.7.4.1 of this Code.

# CHAPTER 33 EXISTING RESIDENTIAL BOARD AND CARE OCCUPANCIES

# (Amd) 33.2.3.4.1 Fire Alarm Systems.

Every existing residential board and care occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

(Delete) 33.2.3.4.1.1

(Delete) 33.2.3.4.1.2

# (Amd) 33.2.3.4.3.1 Smoke and Carbon Monoxide Alarms.

In addition, every existing residential board and care occupancy shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition.

#### (Add) 33.2.3.5.1

All facilities shall be protected throughout by an approved, automatic sprinkler system installed in accordance with 33.2.3.5. through 33.2.3.5.6 using quick response or residential sprinklers.

#### (Amd) 33.2.3.5.2.

In buildings protected throughout by an approved automatic sprinkler system in accordance with 33.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

#### (Amd) 33.2.3.5.2.6

In buildings protected throughout by an approved automatic sprinkler system in accordance with 33.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

(Add) 33.3.3.2.2.1 Any furnace or boiler in the building shall be equipped with an approved remote shutoff switch approved by the AHJ.

# (Amd) 33.3.3.4.1 Fire Alarm Systems.

Every existing residential board and care occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Add) 33.3.3.4.7 Smoke and Carbon Monoxide Alarms.

In addition, every existing residential board and care occupancy shall be provided with either hardwired or wireless smoke and carbon monoxide detectors installed in accordance with NFPA 72, and NFPA 720, 2003 edition.

#### (Add) 33.3.3.5.1

All facilities shall be protected throughout by an approved, automatic sprinkler system installed in accordance with 33.2.3.5. through 33.2.3.5.6 using quick response or residential sprinklers.

#### (Amd) 33.2.3.5.2.

In buildings protected throughout by an approved automatic sprinkler system in accordance with 33.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

#### (Amd) 33.3.5

Portable fire extinguishers shall be provided in all existing residential board and care occupancies in accordance with section 9.7.4.1 of this Code.

# CHAPTER 34 RESERVED

# CHAPTER 35 RESERVED

# CHAPTER 36 NEW MERCANTILE OCCUPANCIES

# (Amd) 36.3.4.1 General.

Every new Class A mercantile occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Amd) 36.3.4.1 Initiation.

Initiation of the required fire alarm system shall be in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Amd) 36.3.4.4

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

#### (Amd) 36.3.5.4.

In buildings protected throughout by an approved automatic sprinkler system in accordance with 36.3.5.1, properly zoned sprinkler heads may be substituted for the required heat detectors of the fire alarm system.

#### (Amd) 36.4.4.4.1.1

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

#### (Amd) 36.4.5.4.1.1

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# CHAPTER 37 EXISTING MERCANTILE OCCUPANCIES

# (Amd) 37.3.4.1 General.

Every existing Class A mercantile occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code

## (Amd) 37.3.4.1.1

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

#### (Amd) 37.3.4.2 Initiation.

Initiation of the required fire alarm system shall be in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Add) 37.3.5.1

Every mercantile occupancy, built, or converted to, on or after June 4, 1976, which is more than two stories in height above the basement and which is not constructed of better than a (2) two hour fire rating, shall be protected by an approved system of automatic sprinklers in accordance with section 9.7 of this Code.

# CHAPTER 38 NEW BUSINESS OCCUPANCIES

# (Amd) 38.3.4.1 General.

Every new business occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code.

#### (Amd) 38.3.4.2 Initiation.

Initiation of the required fire alarm system shall be in accordance with amended Section 9.6 and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Amd) 38.3.4.4

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

#### (Add) 38.3.5.1

Every new business occupancy which is more than two stories in height above the basement and which is not constructed of better than a (2) two hour fire rating, shall be protected by an approved system of automatic sprinklers in accordance with section 9.7 of this Code.

# CHAPTER 39 EXISTING BUSINESS OCCUPANCIES

# (Amd) 39.3.4.1 General.

Every existing business occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Amd) 39.3.4.2 Initiation.

Initiation of the required fire alarm system shall be in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Amd) 39.3.4.4

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ

# (Add) 39.3.5.1

Every business occupancy, built, or converted to, on or after June 4, 1976, which is more than two stories in height above the basement and which is not constructed of better than a (2) two hour fire rating, shall be protected by an approved system of automatic sprinklers in accordance with section 9.7 of this Code.

# CHAPTER 40 INDUSTRIAL OCCUPANCIES

#### (Amd) 40.3.4.1 General.

Every industrial occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Amd) 40.3.4.2 Initiation.

Initiation of the required fire alarm system shall be in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

# (Amd) 40.3.4.4

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

#### (Amd) 40.3.5 Extinguishing Requirements.

# (Add) 40.3.5.1

Every industrial occupancy, built, or converted to, on or after June 4, 1976, which is more than two stories in height above the basement and which is not constructed of better than a (2) two hour fire rating, shall be protected by an approved system of automatic sprinklers in accordance with section 9.7 of this Code.

# CHAPTER 41 RESERVED

# CHAPTER 42 STORAGE OCCUPANCIES

#### (Amd) 42.3.4.1 General.

Every storage occupancy, shall be provided with a fire alarm system in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

(Delete) 42.3.4.1.1

(Delete) 42.3.4.1.2

(Delete) 42.3.4.1.3

#### (Amd) **42.3.4.2** Initiation.

Initiation of the required fire alarm system shall be in accordance with amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code.

#### (Amd) 42.3.4.4

Any conflict between the provisions of this section and the provisions of amended Section 9.6 of this Code and Chapter 13, as amended, of the Rhode Island Fire Prevention Code, shall be resolved in favor of compliance with the strictest combined requirements as determined by the AHJ.

# (Amd) 42.3.5 Extinguishing Requirements.

#### (Add) 42.3.5.1

Every storage occupancy, built, or converted to, on or after June 4, 1976, which is more than two stories in height above the basement and which is not constructed of better than a (2) two hour fire rating, shall be protected by an approved system of automatic sprinklers in accordance with section 9.7 of this Code.

# FIRE SAFETY CODE SECTION 9 REHABILITATION BUILDING AND FIRE CODE FOR EXISTING BUILDINGS AND STRUCTURES

The Rhode Island Rehabilitation Building and Fire Code for Existing Buildings and Structures, previously adopted by the Fire Safety Code Board of Appeal & Review, is hereby re-adopted, in full as FIRE SAFETY CODE SECTION 9 with the following amendment reflecting a mandate of the 2003 Comprehensive Fire Safety Act:

# (Add) 101.1.4

Any existing building or structure, subject to the provisions of the rehabilitation building and fire code for existing buildings and structures, shall also comply with the existing occupancy provisions of the Rhode Island Life Safety Code (Section 8 of the Rhode Island Fire Safety Code) addressing the current or proposed occupancy.

**Please Note**: The members of the Joint Committee on the Rehabilitation Building and Fire Code for Existing Buildings and Structures shall review the Rehabilitation Code in light of the above mandate. The Rehabilitation Board shall provide both the Fire Board and the Building Board with recommended changes to simplify the Rehabilitation Code in light of this mandate. Upon receipt and acceptance of the recommended changes, a new simplified Rehabilitation Code should be proposed, by both the Building and Fire Boards, in 2004.

#### **FOREWORD**

The State of Rhode Island Rehabilitation Building and Fire Code for Existing Buildings and Structures was adopted by the Fire Safety Code Board of Appeal & Review and the Building Code Standards Committee on January 22, 2002. The new Rehabilitation Code provides a single, uniform, statewide code with fire code and building code elements applicable to covered existing buildings and structures. It has an effective date of May 1, 2002. With the adoption of this new code, the Joint Committee on the Rehabilitation Building and Fire Code for Existing Buildings and Structures wishes to acknowledge the substantial efforts, support, and guidance of the following individuals and organizations:

The Joint Committee recognizes the political leadership and support of Governor Lincoln C. Almond, Lt. Governor Charles J. Fogarty, Senate Majority Leader William V. Irons, House Speaker John B. Harwood, and their respective staffs, in making the Rehabilitation Code a reality. The Joint Committee further recognizes the foresight and efforts of Senators Paul S. Kelly, V. Susan Sosnowski, John M. Roney, Dennis L. Algiere and Thomas R. Coderre along with Representatives John J. McCauley, Frank A. Montanaro, Paul E. Moura, Thomas C. Slater, and Rene R. Menard, all of whom introduced the legislation necessary for the adoption of the Rehabilitation Code. The Joint Committee further recognizes the encouragement and support it has received from Mayor Vincent A. Cianci, Jr. and Director of Administration Patricia McLaughlin of the City of Providence. Finally, the Joint Board wishes to thank the Senators and Representatives of the General Assembly who unanimously supported the above legislation.

The Joint Committee recognizes the administrative support, technical assistance, and encouragement it received from the Governor's Deputy Chief of Staff Clark Greene and Senate Policy Director Kenneth Payne. The Joint Committee further recognizes the substantial support of DOA Director Robert Carl, DOA Deputy Director Dante E. Boffi, Jr. and DOA Associate Director of Central Services Dennis J. Lynch, Building Commissioner Joseph A. Cirillo, the Building Code Commission, State Fire Marshal Irving J. Owens, the Fire Safety Code Board of Appeal and Review, and their respective staffs. The Joint Committee further recognizes the substantial day-to-day technical efforts of Providence Fire Marshal David Costa and the day-to-day administrative efforts of staff members Cynthia Dehler, Carol Marsella and Elaine Gordon.

The Joint Committee recognizes and appreciates the participation of the membership of the Rhode Island Builders Association and President Steven Gianlorenzo, with special thanks to Past President Henry Richard, Sr., Executive Board Member Mark Van Noppen, and Executive Director Roger Warren.

The Joint Committee recognizes and appreciates the participation of the membership of the Rhode Island Historical Preservation & Heritage Commission with special thanks to Virginia Hesse, Roberta Randall, and Executive Director Edward Sanderson.

The Joint Committee recognizes and appreciates the participation of the membership of the Governor's Commission on Disabilities with special thanks to Harvey Salvas and Executive Director Robert Cooper.

The Joint Committee recognizes and appreciates the participation of the membership of Grow Smart Rhode Island, with special thanks to Executive Director Scott Wolf.

The Joint Committee recognizes and appreciates the participation of the membership of the Rhode Island League of Cities and Towns with special thanks to Executive Director Daniel Beardsley.

The Joint Committee recognizes and appreciates the participation of the membership of the Providence Foundation with special thanks to Executive Director Daniel Baudouin.

The Joint Committee recognizes and appreciates the participation of the membership and staff of the National Fire Protection Association with special thanks to Vice President Gary Keith. The Board notes that the final draft of this Code was based primarily upon Chapter 54 of NFPA 5000. The Joint Committee finally recognizes and appreciates the guidance and participation of Code Consultants Melvyn Green, William E. Koffel, and David Hattis for their assistance with the original draft of this Code.

# THE JOINT COMMITTEE OF THE REHABILITATION BUILDING AND FIRE CODE FOR EXISTING BUILDINGS AND STRUCTURES

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# **State of Rhode Island** Rehabilitation Building And Fire Code For Existing Buildings And Structures

# **Table of Contents**

Chapter 1: Administration	Page 1
101.0 Purpose and Intent	Page 1
102.0 Compliance	Page 2
103.0 Nonconforming Rights (Existing Buildi	ngs). Page 3
104.0 Relationship to Other Codes,	<b>C</b> ,
Rules, and Ordinance	Page 3
105.0 Preliminary Meeting	
106.0 Permits	
107.0 Appeals	_
108.0 Enforcement	Page 5
Chapter 2: Definitions	Page 6
Chapter 2. Definitions	1 age 0
General	Page 6
Definitions	Page 6
Definitions	1 age 0
Chapter 3: Repairs	Page 11
	C
General	Page 11
Requirements	Page 11
Chapter 4: Renovations	Page 14
General Requirements	Page 14
Additional Requirements	Page 14
Structural Requirements	Page 14
Accessibility	Page 15
Plumbing	Page 15
Boilers and Pressure Vessels	Page 15
Elevators	Page 15
Chapter 5: Alterations	Page 16
General Requirements	Page 16
Structural Requirements	Page 17
Accessibility	Page 17
Electrical Equipment and Wiring	Page 17
Plumbing Fixtures	Page 18
Mechanical	Page 18

Commercial Kitchens	Page 19 Page 20
General Requirements  Nonstructural Requirements	Page 20 Page 20
Chapter 7: Change of Use and Occupancy	Page 31
General Change of Occupancy Structural Requirements Handrails and Guards Health and Hygiene Energy Conservation	Page 31 Page 36 Page 40 Page 40 Page 40 Page 40
Chapter 8: Additions	Page 41
General Requirements Heights and Areas Fire Protection Systems Structural Accessibility Energy Conservation Plumbing	Page 41 Page 41 Page 41 Page 42 Page 43 Page 43
Chapter 9: Historical Buildings	Page 44
General Repairs Relocated Buildings Repair, Renovation, Alteration or Reconstruction Change of Occupancy	Page 44 Page 45 Page 45 Page 45 Page 47
Chapter 10: Accessibility	Page 50
GeneralRequirementsAlterations: Path of TravelAlterations: Elevator ExemptionRemoval of Barriers	Page 50 Page 50 Page 50 Page 52 Page 52
Chapter 11: Relocated or Moved Buildings	
	Page 55

Requirements	Page 55
Chapter 12: Construction Safeguards	Page 56
General	Page 56
Protection of Adjoining Property	Page 58
Temporary Use of Streets, Alleys and	
Public Property	Page 58
Fire Extinguishers	Page 58
Exits	Page 58
Standpipes System	Page 59
Automatic Sprinkler System	Page 59
Additional Fire Protection Safeguards	Page 59

State of Rhode Island Rehabilitation Building And Fire Code For Existing Buildings And Structures

# Chapter 1. Administration

#### 101.0 Purpose and Intent

- 101.1 The purpose of this code is to encourage the continued use or reuse of existing buildings and structures. This code is intended to permit repairs, renovations, alterations, reconstructions, additions, and/or changes of occupancy that maintain or improve the health, safety and welfare in existing buildings, without requiring full compliance with the construction requirements of the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code, except for proportional additional work as specified in this code. Existing buildings, subject to this code, shall continue to be subject to the administrative, maintenance and operational requirements of the above-referenced codes. Building owners shall further comply with the regulations adopted by the Rhode Island Department of Health and all other public bodies charged with protecting the public health and safety. This code shall only apply to buildings in existence for at least ten (10) years prior to the application for a permit under this code. This code shall have an effective date of May 1, 2002.
- **101.1.1 Uses not covered:** All repairs, renovations, alterations, reconstruction, additions and/or conversions (changes of occupancy) to health care facilities, nursing homes, child day care centers, community residences, educational occupancies, detention and correctional occupancies, high hazard occupancies, and one, two, and three family homes shall not be covered or enforced by this code at this time and shall comply with the applicable provisions of the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code.
- **101.1.2** The fire code element of this code generally addresses means of egress, fire detection systems, fire suppression systems, and fire-related mechanical, electrical and plumbing systems. In general, the fire code element incorporates national rehabilitation code philosophies by coupling many of the passive fire protection elements of Nationally Applicable Recommended Rehabilitation Provisions developed by HUD and the newly drafted NFPA 5000 Chapter 54 for existing buildings. To achieve a level of active fire protection acceptable to the Fire Service of Rhode Island, this code further incorporates the fire protection elements of the current Rhode Island fire alarm, sprinkler system and related active fire safety systems.
- **101.1.3** The building code element of this code generally addresses structural, energy, accessibility, boiler and elevator requirements along with all non-fire related mechanical, electrical and plumbing systems. In general, the building code elements incorporate the underlying philosophy of Nationally Applicable Recommended Rehabilitation Provisions

developed by HUD and the newly drafted International Existing Building Code and NFPA provisions for the rehabilitation of existing buildings.

- **101.2** All work shall be classified into six categories: repair, renovation, alteration, reconstruction, addition, and change of occupancy. Specific requirements are established for each work category in this code. Work of more than one category shall be permitted to be part of a single work project.
- **101.2.1** Where a project includes one category of work in one building area and another category of work in a separate area of the building, each project area shall comply with the requirements of the respective category of work.
- **101.2.2** Where a project consisting of alterations and reconstruction is performed in the same work area, or in contiguous work areas, the project shall comply with the requirements applicable to a reconstruction.

Exception: Where the reconstruction work area is less than ten (10%) percent of the modification work area, the two shall be considered as independent work areas, and the respective requirements shall apply.

101.2.3 Nothing in this chapter shall be interpreted as requiring the repair, renovation, alteration or reconstruction of existing buildings which are in compliance with the Building and Fire Codes. If a building was originally inspected and determined not to be in compliance with either the Fire or Building Code, the owner shall have three options: first, the owner may correct the cited deficiencies and bring the building into compliance with the Fire or Building Code provisions in question. The second option would be to apply for an appropriate variance, with either the Fire Board or Building Board. The third option would be to present the authority having jurisdiction a plan of action bringing the facility into compliance with the provisions of this Code. In the case where an owner plans to unilaterally proceed with a repair, renovation, alteration or reconstruction of an existing building, the owner shall submit plans under this Code. Nothing herein shall prevent the owner from submitting plans for review under the current Building Code and Fire Code.

# 102.0 Compliance

- **102.1** Categories of work: Repairs, renovations, alterations, reconstruction, additions, and changes of occupancy shall conform to the requirements of this code.
- **102.2 Equivalent alternatives:** This code is not intended to prevent the use of any alternate material, alternate design or alternate method of construction not specifically prescribed herein, provided any alternate has been deemed to be equivalent by the authority having jurisdiction and its use authorized by the Rehabilitation Board.
- **102.3 Other alternatives:** Where compliance with this code or with any other code as required by this code is technically infeasible or would impose undue hardship because of structural, construction or dimensional difficulties, the Rehabilitation Board is authorized to accept other alternative materials, design features and/or operational features.

- **102.3.1** Notwithstanding the above, the local certified building official, with the approval of the Building Commissioner, may grant limited dimensional modifications from the building code element of this code; and the local certified fire marshal, with the approval of the State Fire Marshal, may grant limited dimensional modifications from the fire code element of this code. The dimensional modifications referred to above would be limited to existing ceiling heights, door widths, window openings, stairway and hallway widths, and the dimensions of stairway treads and risers. The above dimensional modifications may only be granted when the total existing egress width can accommodate the maximum occupancy load.
- **102.4 Effective date:** Requirements of this code, and the requirements of this code that reference the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code or Accessibility Code shall be based on the respective codes in effect at the time of the issuance of the permit, and not on any subsequent amendments unless the above codes are specifically made retroactive by statute or administrative regulation adopted by the Fire Board, Building Board, or other authorized Board. This code shall only apply to buildings in existence for at least ten (10) years prior to the application for a permit under this code.
- **102.5 Permit expiration:** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. One or more extensions of not more than 180 days each shall be permitted when requests are submitted in writing and justifiable cause demonstrated.
- **102.6** Compliance with other codes: Buildings, elements, components or systems in compliance with the current edition of the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code shall not be required to comply with any more restrictive requirement of this code.

Exception: Required sprinkler and fire alarm systems.

- **102.7** Elements, components and systems of existing buildings with features that exceed the requirements of the codes for new construction and not otherwise required as part of prior documented approved alternative arrangements shall not be prevented by this code from being modified as long as they remain in compliance with the applicable codes for new construction.
- **102.8** It is not the intent of this Code to supersede any codes or ordinances that address dangerous or unsafe buildings.
- **102.9** Work mandated by any accessibility, property, housing, or fire code, or mandated by any licensing rule or ordinance, adopted pursuant to law, shall conform only to the requirements of that code, rule, or ordinance and shall not be required to conform to this chapter unless the code requiring such work so provides.

**102.10** Buildings and structures located wholly or partially within the flood hazard area established by the Building Code shall comply with that code.

# 103.0 Nonconforming Rights (Existing Buildings)

**103.1** Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued, if such use or occupancy was legal at the time of the adoption of this code provided such continued use is not hazardous to life. Nothing in this code shall be interpreted as requiring the repair, renovation, alteration or reconstruction of existing buildings.

# 104.0 Relationship to Other Codes, Rules, and Ordinances

- **104.1** It is not the intent of this code to supersede any codes or ordinances that address dangerous or unsafe buildings.
- **104.2** It is not the intent of this code to supersede any retroactive regulations that impose stricter requirements.
- **104.3** It is not the intent of this code to supersede the Minimum Housing Code by establishing minimum standards of habitability for housing.
- **104.4** Work mandated by any of the following codes, rules, or ordinances that is not part of a rehabilitation project shall conform only to the requirements of those codes, rules or ordinances and shall not be required to conform to this code unless the document requiring such work so provides:
- (1) accessibility, housing, property maintenance;
- (2) any codes or ordinances that address dangerous or unsafe buildings or conditions;
- (3) any licensing rule or ordinance, adopted pursuant to law; and
- (4) Rhode Island Fire Prevention Code.
- (5) Rhode Island Fire Safety Code.
- (6) Rhode Island Building Code.

# 105.0 Preliminary Meeting

- **105.1** If a building permit is required for a complex rehabilitation project involving multiple codes, then at the request of the prospective permit owner or authorized representative prior to the submission of the construction permit application, the certified building official and the certified fire marshal or their designees, and agency representatives from all necessary agencies in accordance with Section 105.2 to the extent possible, shall meet with the prospective applicant to discuss plans for any proposed work or change of occupancy under this code prior to the application for the permit.
- **105.2** The preliminary meeting, to the extent possible, shall include the officials responsible for permit approval and enforcement in the following areas, as may be applicable to the rehabilitation project:

Building Code;
Mechanical Code;
Plumbing Code;
Electrical Code;
Rhode Island Fire Safety Code;
Rhode Island Fire Prevention Code;
Boiler Safety Code;
Energy Code;
Elevator Code;
State and Local historical preservation ordinances;
Accessibility Code.

Where possible, a single meeting of all the parties shall be arranged. Where the total cost of the project exceeds five hundred thousand (\$500,000) dollars, the officials shall meet onsite if so requested by the owner.

**105.3** The purpose of this preliminary meeting is for the prospective applicant to present its intentions for the proposed work to the responsible code officials so that together they can determine the specific requirements in the codes listed in Section 105.2 to be applied to proposed project. Any decisions reduced to writing and agreed to by all parties regarding the specific requirements of the codes listed in Section 105.2 that are to be applied to the proposed project made at the preliminary meeting shall be binding upon the prospective applicant and the code officials unless circumstances arise which were unknown or could not be ascertained by the prospective applicant, the certified building official and/or the certified fire marshal, at the time of the preliminary meeting. Notwithstanding the above, nothing herein shall relieve the applicant of the obligation to fully comply with the provisions of this code in good faith.

**105.4** For a rehabilitation project or portion thereof that is in the repair, renovation or alteration category of work, a preliminary meeting may be granted at the discretion of the certified building official and the certified fire marshal when a request for a preliminary meeting is made by the prospective applicant prior to the submission of the construction permit application.

#### **106.0 Permits**

**106.1** The rehabilitation work area, as defined in Chapter 2, shall be clearly identified on all construction permit applications, construction documents and permits required by certified building official and the certified fire marshal.

#### 107.0 Appeals

**107.1** Any appeal of issues under this code shall be heard exclusively by the Joint Committee on Rehabilitation Building Code for Existing Buildings and Structures pursuant to R.I.G.L. 23-29.1-4. Specifically, any building owner may consult the authority having jurisdiction for advice and assistance in complying with the provisions of the rehabilitation building and fire code. In case of practical difficulties, the authority having jurisdiction shall refer any request for variance to

the joint committee. The petitioner for the variance shall set forth to the joint committee in the petition the grounds or reasons for requesting the variance.

The joint committee shall fix a day for hearing on the petition and shall give reasonable notice thereof to the petitioner and the property owners within two hundred (200) feet of the petitioner's building or structure when, in the board's discretion, it may have an adverse effect on neighboring properties. A properly indexed record of all variations made shall be kept in the office of the joint committee and shall be open to public inspection. Any building owner may file a petition for a variance to the board by registered mail, and a hearing date shall be set by the joint committee within thirty (30) days of filing a completed application including a filing fee, established in accordance with the following fee schedule:

Petitions related to construction, alteration, renovation, and/or conversion to other use of buildings and structures:

not more than eight thousand (8,000) square feet...one hundred dollars (\$100) filing fee; more than eight thousand (8,000) square feet but not more than twenty-five thousand (25,000) square feet...three hundred dollars (\$300) filing fee;

more than twenty-five thousand (25,000) square feet but not more than fifty thousand (50,000) square feet...five hundred dollars (\$500) filing fee;

more than fifty thousand (50,000) square feet...one thousand dollars (\$1,000) filing fee.

The term "square feet," as used herein, shall be the total floor space and/or storage capacity of the subject building or structure, as determined and certified by the building code commission or his or her designee, subject to review by the board. The joint committee chairperson may delegate a subcommittee of the joint committee to conduct a hearing and take testimony from the petitioner. The subcommittee shall make recommendations to the joint committee as to their findings, and a decision shall be rendered within ten (10) days of the subcommittee's report. If the petitioner is aggrieved by the subcommittee's recommendations, the petitioner shall have the right of hearing before the entire joint committee within thirty (30) days of the rendered decision.

The application filing fee income shall be deposited as general review.

Appeals. Review of refusal of variation – Review of final order. Any building owner aggrieved by any decision of the joint committee refusing to grant a variation pursuant to the provisions of section 23-29.1-4(A) may, within thirty (30) days after the decision, commence an action in district court against the executive secretary of the joint committee, only in his or her official capacity for a review of the decision. The findings of the joint committee shall be conclusive unless clearly erroneous. A party aggrieved by a final order of the court may seek review thereof in the Supreme Court by petition for writ of certiorari in accordance with the procedures contained in section 24-25-16.

#### 108.0 Enforcement

108.1 The building code element of this code is only enforceable by the Building Commissioner, his or her staff, and those local building officials who are further trained and certified by the Building Commissioner. The fire code element of this code is only enforceable by the State Fire Marshal, his or her staff, and those assistant deputy state fire marshals who are

further trained and certified by the State Fire Marshal. The above-certified officials shall utilize the existing enforcement procedures of the fire code, when enforcing a fire code element, and the building code, when enforcing a building code element.

**108.2** Upon request of a building owner, his or her architect or engineer, the Building Commissioner, the State Fire Marshal, or any other interested party, the Rehabilitation Board shall provide reasonable interpretation of the provisions of the Rehabilitation Code. The above interpretations shall be binding upon all parties until such time as the subject code section is amended pursuant to R.I.G.L. 23-29.1-2(b)(2).

# **Chapter 2. Definitions**

#### 201.0 General

**201.1** The words and terms used in this code shall have the following meanings unless the context clearly indicates otherwise. Any term not defined herein which is defined in any other code applicable to this code shall have the meaning as defined in that code. Where a term is defined in this code and is also defined in another code, then the term shall have the meaning as defined herein wherever it is used in this code. Words used in the present tense include the future. Words in the masculine gender include the feminine and neuter. The singular number includes the plural and the plural number includes the singular.

#### 202.0 Definitions

Accessibility: See Chapter 10, Accessibility

**Administrative requirements:** Statutory and/or regulatory requirements addressing non-structural safety requirements of an occupancy such as firefighters on duty in a Place of Assembly or a certain number of fire drills in an Educational Occupancy.

**Approximate fire rating:** A determination by the Authority Having Jurisdiction that the referenced component of a building is the rough equivalent of a comparably listed or recognized assembly. For example, a solid core wood door, with a minimum thickness of one and three-eighths (1 3/8") inches, installed securely in an existing door jamb, may be determined to have an approximate fire rating of twenty minutes. Likewise, a layer of five-eighths (5/8") inch sheetrock over an existing plaster ceiling, or comparable assembly approved by the State Fire Marshal and the Building Commissioner, may be determined to provide an approximate fire separation of one hour between occupancies. In determining the approximate fire rating of an assembly, the authority having jurisdiction may rely upon Section 720 (calculated fire resistance) of the International Building Code, 2000 edition. (Appendix A)

**Artist-in-residence:** An artist or artists using a space within a building for combined living and artistic working purposes.

**As amended:** The term "as amended" as used herein, refers to the rules and regulations, legally adopted by the Building Board and/or Fire Board, which clarify, modify and/or amend the referenced model code or statutory provision.

**Authority having jurisdiction:** The State Building Commissioner, his or her certified staff and certified building officials shall enforce the Building Code element of this Code. The State Fire Marshal, his or her certified staff and certified Assistant Deputy State Fire Marshals shall enforce the Fire Code element of this Code. See also definitions of Certified Building Official and Certified Assistant Deputy State Fire Marshal.

**Boiler Code**: Rhode Island Boiler and Pressure Vessel Code – 1989.

**Building Code**: R.I.G.L. 23-27.3-100 et seq. and all rules and regulations adopted by the Building Code Standards Committee pursuant to R.I.G.L. 23-27.3-101.9 (a-c), Regulation SBC-1, dated May 1, 1998.

**Building Board**: The Rhode Island Building Code Standards Committee established pursuant to R.I.G.L. 23-27.3-100.1.4.

**Categories of work:** The nature and extent of construction work undertaken in an existing building. The following categories of work entail increased requirements respectively:

**Repair:** The patching, restoration, painting and/or minor replacement of materials, elements, components, equipment and/or fixtures for the purposes of maintaining such materials, elements, components, equipment and/or fixtures in good or sound condition.

**Renovation:** The change, strengthening or addition of load bearing elements, the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment and/or fixtures. Renovation involves no reconfiguration of spaces.

**Alteration:** The reconfiguration of any space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

**Reconstruction:** The reconfiguration of a space which affects an exit, or a corridor shared by more than a single tenant; and/or reconfiguration of space such that the rehabilitation work area is not permitted to be occupied because existing means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained; and/or extensive alterations as defined in Chapter 5 of this code.

**Change of occupancy:** A change in the purpose for which a building or portion thereof is used or intended to be used as defined in the Building Code.

**Addition:** An increase in building area, aggregate floor area, height or number of stories of a structure.

**Certified Assistant Deputy State Fire Marshal:** An Assistant Deputy State Fire Marshal, or certified member of the State Fire Marshal's staff, who has been trained and certified by the State Fire Marshal to enforce the fire code elements of this code.

**Certified Building Official:** A Building Official, or certified member of the Building Commissioner's staff, who has been trained and certified by the State Building Commissioner to enforce the building code elements of this code.

Complex rehabilitation project involving multiple codes: A rehabilitation project or portion thereof that involves two or more construction codes enumerated in Section 105.2 and (1) is in one of the following categories of work: addition, change of occupancy or reconstruction or (2) is in any category of work and involves the installation of sprinklers.

**Construction permit application:** Any application made to a state or local jurisdiction for a permit or other government approval for a rehabilitation project.

**Covered occupancies:** See Table 202.0.

**Dangerous (structurally):** Where the stresses in any member, the condition of the building or any of its components or elements or attachments, or other condition that results in an overload exceeding one hundred fifty (150%) percent of the stress allowed for the member or material in the Building Code.

**Electrical Code:** See regulation SBC-5, as adopted and amended by the Building Code Standards Committee.

**Elevator Code:** Rhode Island Elevator Safety Code, dated May 15, 1999.

**Energy Code:** See regulation SBC-8, as adopted and amended by the Building Code Standards Committee.

**Equipment or fixture:** Any plumbing, heating, electrical, ventilating, air conditioning, refrigerating and fire protection equipment, and elevators, dumb waiters, escalators, boilers, pressure vessels and other mechanical facilities or installations, which are related to building services. Equipment or fixture shall not include manufacturing, production or process equipment, but shall include connections from building service to process equipment.

**Exit:** That portion of a means of egress that is separated from all other spaces of the building or structure by construction or equipment, in accordance with the adopted version of NFPA 101 Life Safety Code for new construction, to provide a protected way of travel to the exit discharge. Exits include exterior exit doors, exit passageways, horizontal exits, separated exit stairs, and separated exit ramps.

**Exit access:** That portion of a means of egress that leads to an exit.

**Exit discharge**: That portion of a means of egress between the termination of an exit and a public way.

**Fire alarm system:** A mandated fire detection system as outlined in R.I.G.L. 23-28.25-1 et seq. including all related rules and regulations adopted by the Fire Safety Code Board of Appeal and Review pursuant to R.I.G.L. 23-28.3-3.

**Fire Board:** Rhode Island Fire Safety Code Board of Appeal and Review established pursuant to R.I.G.L. 23-28.3-2.

**Fire Prevention Code:** NFPA 1- Fire Prevention Code and NFPA 101- Life Safety Code for new construction as amended by the Fire Safety Code Board of Appeal and Review.

**Fire Safety Code:** R.I.G.L. 23-28.1-1 et seq. and all rules and regulations adopted by the Fire Safety Code Board of Appeal and Review pursuant to R.I.G.L. 23-28.3-3, including the Rhode Island Fire Prevention Code.

#### **Hazard of Contents:**

**High Hazard:** High Hazard contents shall be classified as those that are likely to burn with extreme rapidity from which explosions are likely.

**Low Hazard:** Low hazard contents shall be classified as those of such low combustibility that no self-propagating fire therein can occur.

**Ordinary Hazard:** Ordinary hazard contents shall be classified as those that are likely to burn with moderate rapidity or to give off a considerable volume of smoke.

**High-rise building**: A building greater than seventy-five (75') feet in height where the building height is measured from the lowest level of fire department vehicle access to the floor of the highest occupiable story.

**Historical building:** See 901.1.1 Definition: Historical Building.

**Horizontal exit:** A way of passage from one building to an area of refuge in another building on approximately the same level, or a way of passage through or around a fire barrier to an area of refuge on approximately the same level in the same building that affords safety from fire and smoke originating from the area of incidence and areas communicating therewith.

**Imminent danger:** Any conditions or practices in any occupancy or structure that pose a danger that could reasonably be expected to cause death, serious physical harm, or serious property loss.

**Labeled:** Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled

equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

**Legal Use:** The last recorded use of a building that was established and approved by the local zoning official.

**Life Safety Code:** References to the "Life Safety Code" in the text of this Code, shall refer the user to the provisions of the NFPA 101, Life Safety Code, 2000 Edition, unless otherwise noted.

**Load bearing element:** Any column, girder, beam, joist, truss, rafter, wall, floor or roof sheathing which supports any vertical load in addition to its own weight, and/or any lateral load.

**Local jurisdiction:** See definitions of Certified Building Official and Certified Assistant Deputy State Fire Marshal (above).

**Maintenance requirements:** Statutory and/or regulatory requirements addressing the manner and frequency of inspection, repair and/or replacement of the fire protection equipment and systems in a building such as sprinkler and fire alarm systems, exit signs, emergency lighting, fire extinguishers and cooking and other suppression systems.

Materials and methods requirements: Those requirements in the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code that specify material standards, details of installation and connection, joints, penetrations and continuity of any element, component or system in the building. The required quantity, fire-resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

**Means of egress:** A continuous and unobstructed way of travel from any point in a building or structure to a public way consisting of three separate and distinct parts: (1) the exit access, (2) the exit, and (3) the exit discharge.

**Means of escape:** A way out of a building or structure that does not conform to the strict definition of *means of egress* but does provide an alternate way out.

**Mezzanine:** An intermediate level between the floor and the ceiling of any room or space.

**Mechanical Code:** See regulation SBC-4, dated April 1, 1998.

**Minimum Housing Code:** Adopted pursuant to RIGL 45-24.2-1.

**Occupancy classification:** The classification of occupancies into groups in accordance with Section 302 of the Building Code as modified by Section 202.0 of this Code.

The following table is provided for the user's convenience in order to allow quick cross-reference between the chapters of NFPA 101, Life Safety Code and the Building Code covering a specific occupancy.

**Table 202.0** 

Occupancy or Use	B.O.C.A Use Group	NFPA 101, Life Safety Code 2000 Edition Chapter
Assembly	A-1, A-2, A-3, A-4, A-5	Chapter 13
Lodging or Rooming	R-1	Chapter 26
Hotels & Dormitories	R-1	Chapter 29
Apartments (4 units and up)	R-2	Chapter 31
Mercantile	M	Chapter 37
Business	В	Chapter 39
Industrial	F-1, F-2	Chapter 40
Storage	S-1, S-2	Chapter 42

**Operational requirements:** Statutory and/or regulatory requirements addressing how a building is operated such as the determination of the maximum occupancy in a Place of Assembly.

**Permit:** An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specific activity.

**Plumbing Code:** See regulation SBC-3, dated April 1, 1998.

**Rehabilitation:** Any work, as described by the categories of work defined herein, undertaken in an existing building.

**Rehabilitation Board**: Rhode Island Joint Committee on the Rehabilitation Building Code for Existing Buildings and Structures established pursuant to R.I.G.L. 23-29.1-2.

**Rehabilitation Code:** A code designed to encourage the continued use or reuse of legally existing buildings adopted pursuant to the provisions of R.I.G.L. 23-29.1-1 et seq.

**Rehabilitation work area:** That portion of a building affected by any renovation, alteration or reconstruction work as initially intended by the owner and indicated as such in the permit. Rehabilitation work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required by this code.

**Sprinkler system**: A system, designed in accordance with NFPA 13, 13R and/or 13D, as required and/or amended pursuant to R.I.G.L. 23-29.1-1 et seq., which sharply reduces the heat release rate of a fire and preventing its re-growth by means of direct and sufficient application of water through the fire plume to the burning surface.

**Structural frame:** The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads. The members of floor or roof panels which have no connection to the columns shall be considered secondary members and not a part of the structural frame.

**Substantial damage:** For the purpose of determining compliance with the flood provisions of this code, damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50%) percent of the market value of the structure before the damage occurred.

**Substantial improvement:** For the purpose of determining compliance with the flood provisions of this code, any repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds fifty (50%) percent of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

- 1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the code official and that are the minimum necessary to assure safe living conditions.
- 2. Any alteration of a historical structure provided that the alteration will not preclude the structure's continued designation as a historical structure.

## Substantial structural damage: A condition where:

- 1. The vertical elements of the lateral force resisting system in any story, in any direction and taken as a whole, have suffered damage such that the lateral load-carrying capacity has been reduced by more than twenty (20%) percent from its pre-damaged condition, or;
- 2. The vertical load carrying components supporting more than thirty (30%) percent of the structure's floor or roof area have suffered a reduction in vertical load carrying capacity to below seventy five (75%) percent of the International Building Code required strength levels calculated by either the strength or allowable stress method.

**Technically infeasible:** A change to a building that has little likelihood of being accomplished because the existing structural conditions require the removal or modification of a load-bearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with applicable requirements.

**Unsafe buildings or equipment:** Buildings or existing equipment that are unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition.

**Work area:** That portion or portions of a building consisting of all renovated or reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required by this code.

## Chapter 3. Repairs

#### 301.0 General

**301.1** Repairs are defined as the patching, restoration, painting and/or minor replacement of materials, elements, components, equipment and/or fixtures for the purposes of maintaining such materials, elements, components, equipment and/or fixtures in good or sound condition. All repairs shall comply with the requirements of this Chapter.

Exception: As modified in Chapter 9 for repairs in historical buildings.

#### **302.0 Requirements**

- **302.1** Except as is otherwise required herein, work shall be done using like materials, or materials permitted by the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, NFPA 101 Life Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code or Elevator Code as applicable. **BFO**
- **302.1.1** Hazardous materials no longer permitted, such as asbestos and lead-based paint, shall not be used. **B**
- **302.1.2** Conformance: The work shall not make the building less conforming with the building, plumbing, mechanical, electrical or fire codes of the jurisdiction, or with alternative materials, design and methods of construction or any previously approved plans, modifications, alternate methods or compliance alternatives, than it was before the repair was undertaken. **BFO**
- **302.1.3 Flood hazard areas:** In flood hazard areas, repairs that constitute substantial improvement shall require that the building comply with the Building Code section 107.0 **B**
- **302.2** Replacement glazing in hazardous locations shall comply with the Safety Glazing requirements of

Section 2406 of the Building Code, and paragraph 2403.1 referenced therein. **B** *Exceptions:* 

- 1. Glass-block walls may be repaired using like materials.
- 2. Louvered windows and jalousies may be repaired using like materials.
- **302.3 Structural:** Repairs of structural elements shall comply with this section. The work shall cause no diminution of structural strength. The work shall not make the building less conforming with the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, NFPA 101-Life Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code where applicable, or

- with any previously approved alternative arrangements, than it was before the repair was undertaken.  $\bf B$
- **302.3.1 Wind design:** Wind design of existing buildings shall be based upon the procedures specified in the Building Code. **B**
- **302.3.2 Reduction of strength:** Repairs shall not reduce the structural strength or stability of the building, structure or any individual member thereof. **B** *Exception: Such reduction shall be allowed provided the capacity is not reduced to below the requirements of the Building Code.*
- **302.3.3 Damaged buildings:** Damaged buildings shall be repaired in accordance with this section. **B**
- **302.3.3.1** New structural frame members: New structural frame members used in the repair of damaged buildings, including anchorage and connections, shall comply with the Building Code unless the authority having jurisdiction specifically allows replacement with like materials. **B**
- **302.3.4 Substantial structural damage:** Buildings which have sustained substantial structural damage shall comply with this section. **B**
- **302.3.4.1 Engineering evaluation and analysis:** An engineering evaluation and analysis which establishes the structural adequacy of the damaged building shall be prepared by a registered design professional and submitted to the code official. The evaluation and analysis may assume that all non-damaged structural elements and systems have their original strength and stiffness. **B**
- **302.3.4.2 Extent of repair:** The evaluation and analysis shall demonstrate that the building once repaired complies with the wind provisions of the Building Code. **B**
- **302.3.5 Below substantial structural damage:** Repairs to buildings damaged to a level below the substantial structural damage level as defined in Chapter 2 of this Code shall be allowed to be made with the materials, methods and strengths in existence prior to the damage unless such existing conditions are dangerous as defined in Chapter 2. New structural frame members, as defined in Chapter 2, shall comply with Section 302.3.3.1. **B**
- **302.3.6 Other uncovered structural elements:** Where in the course of conducting repairs, other uncovered structural elements are found to be unsound or otherwise structurally deficient, such elements shall be made to conform to the provisions of section 302.3.4.1 of this Code. **B**
- **302.3.7 Flood hazard areas:** In flood hazard areas, damaged buildings that sustain substantial damage shall be brought into compliance with Building Code section 3107.0. **B**
- **302.3.8 Re-roofing:** Re-roofing in excess of twenty-five (25%) percent of the roof area of the entire building shall comply with section 403.2.1 of this code. **B**

## 302.4 Plumbing

- **302.4.1 Materials:** The following plumbing materials and supplies shall not be used unless specifically allowed by the current plumbing code:
- 1. Sheet and tubular copper and brass trap and tailpiece fittings less than the minimum wall thickness of .027" (0.69 mm).
- 2. Solder having more than 0.2% lead in the repair of potable water systems.
- 3. Water closets having a concealed trap seal or an unventilated space or having walls that are not thoroughly washed at each discharge in accordance with ASME A112.19.2.
- 4. The following types of joints shall be prohibited:

Cement or concrete joints

Mastic or hot-pour bituminous joints

Joints made with fittings not approved for the specific installation Joints between different diameter pipes made with elasto-meric rolling O-rings Solvent-cement joints between different types of plastic pipe Saddle-type fittings

5. The following type of traps are prohibited:

Traps that depend on moving parts to maintain the seal.

Bell traps

Crown-vented traps

Traps not integral with a fixture and that depend on interior partitions for the seal, except those traps constructed of an approved material that is resistant to corrosion and degradation. **B** 

**302.4.2 Water closet replacement:** When any water closet is replaced, the replacement water closet shall comply with the Plumbing Code SBC-3. The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.6 gallons (6L) per flushing cycle. **B** *Exception: Blowout design water closets* [3.5 gallons (13L) per flushing cycle].

**302.5** Electrical: Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material. **B** 

# Exceptions:

- 1. Electrical products shall comply with Section 110-3(b) "Installation and Use" of the Electrical Code.
- 2. Replacement of electrical receptacles shall comply with the requirements of Section 210-7(d) of the Electrical Code.
- 3. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per Section 240-51(b) of the Electrical Code.
- 4. For replacement of non-grounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuit, the grounding conductor of a grounding type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system as described in Section 250-81 of the Electrical Code, or to any accessible point on the grounding electrode conductor.

5. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250-60 of the Electrical Code are met.

#### 302.6 Mechanical

- **302.6.1** Defective material or parts shall be replaced or repaired in such a manner so as to preserve the original approval or listing. **B**
- **302.6.2** Temporary repairs may not be made to a damaged heat exchanger. **B**

#### **302.7** Boilers and Pressure Vessels

- **302.7.1** Repairs and replacements of fittings or appliances shall comply with the Mechanical Code SBC 4. **B**
- **302.7.2** Repairs of boilers or pressure vessels shall comply with the requirements specified in the Rhode Island Boiler and Pressure Vessel Code, 1989 edition. (Boilers over 200,000 BTU require approval by Department of Labor and Training.) **BO**
- **302.8 Elevators:** All repairs shall be done in accordance the Rhode Island Elevator Safety Code, May 15, 1999 edition. (Elevator approval by the Department of Labor and Training.) **BO**

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.
- "O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

# **Chapter 4. Renovations**

## **401.0 General Requirements**

**401.1** Renovations are defined as the change, strengthening or addition of load bearing elements, the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment and/or fixtures. Renovation involves no reconfiguration of spaces. All renovations shall comply with the requirements of this Chapter. *Exception: As modified in Section 904.0 for historical buildings.* 

- **401.2** All new work shall comply with the materials and methods requirements, as defined in Chapter 2.
- **401.3** The work shall not make the building less conforming with the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, NFPA 101, Life Safety Code for existing buildings, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code as applicable, or with any previously approved alternative arrangements, than it was before the renovation was undertaken. **BFO** *Exception: Minor reductions in the clear opening dimensions of replacement doors and windows that result from the use of different materials shall be allowed, unless such reductions are prohibited by ADAAG.*

## **402.0** Additional Requirements

- **402.1** New interior finishes shall comply with the flame spread requirements of NFPA 101, Life Safety Code for new construction. **F**
- **402.2** New carpeting used as an interior floor finish material shall comply with the radiant flux requirements of NFPA 101, Life Safety Code for new construction. **F**
- **402.3** Replacement glazing in hazardous locations shall comply with the Safety Glazing requirements of Section 2406 of the Building Code, and paragraph 2403.1 referenced therein. **B** *Exceptions:*
- 1. Glass-block walls may be repaired using like materials.
- 2. Louvered windows and jalousies may be repaired using like materials.

#### **403.0 Structural Requirements**

- **403.1** Structural elements which are uncovered during the course of the renovation and which are found to be unsound or structurally dangerous, shall be rehabilitated to comply with the load requirements of Chapter 16 of the Building Code and the applicable material stress requirements of Chapters 19 (Concrete), 20 (Aluminum), 21 (Masonry), 22 (Steel), or 23 (Wood) of the Building Code. Where renovation work includes replacement of equipment that is supported by the building or where a re-roofing permit is required, the structural provisions of this section shall apply. **B**
- **403.2 Design criteria:** Existing structural components supporting renovation work shall comply with this section. **B**
- **403.2.1 Replacement of roofing or equipment:** Where replacement of roofing or equipment results in additional dead loads, structural components supporting such re-roofing or equipment shall comply with the vertical load requirements of the Building Code. **B**Exceptions:
  - 1. Structural elements whose stress is not increased by more than five (5%) percent.

- 2. Buildings constructed in accordance with the conventional construction methods of the Building Code and where the additional dead load from the equipment is not increased by more than five (5%) percent.
- **403.3 Roof diaphragm:** Where roofing materials are removed from more than fifty (50%) percent of the roof diaphragm of a building or section of a building where the roof diaphragm is a part of the main wind force resisting system the integrity of the roof diaphragm shall be evaluated and if found deficient due to insufficient or deteriorated connections such connections shall be provided or replaced. **B**

## 404.0 Accessibility

**404.1** Buildings undergoing a renovation that affects the usability of the building by persons with disabilities shall comply with Chapter 10 of this Code. **B** 

## 405.0 Plumbing

**405.1 Water conservation:** When any water closet, urinal, lavatory faucet, kitchen faucet or shower head is replaced, the replacement fixture shall comply with the water conservation requirements specified in Table 604.4 of the International Plumbing Code, 2000. **B** 

#### **406.0** Boilers and Pressure Vessels

- **406.1** Installation or replacement of fittings, appliances and boilers shall be in accordance with the Mechanical Code. **BO**
- **406.2** Replacement boiler installed in an existing building shall comply with access and egress requirements specified in the Rhode Island Boiler and Pressure Vessel Code, 1989 edition and/or the Mechanical Code SBC-4. (Boilers over 200,000 BTU require approval by the Department of Labor and Training.) **BO**
- **406.3** A boiler room in which a new or replacement boiler is installed shall comply with the air and ventilation requirements specified in Mechanical Code SBC 4. **B**

#### 407.0 Elevators

**407.1** Any renovation of an existing elevator shall comply with Part XII of the ASME A 17.1-1996 and all subsequent amendments and revisions to it, as adopted by the Rhode Island Elevator Safety Code, May 15, 1999 edition. (Elevator approval by the Department of Labor and Training.) **BO** 

Exception: The installation of new elevators shall comply with Section 501.3.

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.
- "O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **Chapter 5. Alterations**

#### 501.0 General Requirements

**501.1** Alterations are defined as the reconfiguration of any space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment. All alterations shall comply with the requirements of this Chapter and Chapter 4 of this Code.

Exception: As modified in Section 904.0 for historical buildings.

#### **501.2** Extensive Alterations

**501.2.1** The alteration of an entire building or an entire occupancy within a building shall be considered as a reconstruction and shall comply with the requirements of Chapter 6 of this code for the applicable occupancy. **BFO** 

Exception: Alteration work that is exclusively either plumbing, mechanical, fire protection system or electrical shall not be considered a reconstruction, regardless of its extent.

**501.2.2** When the total area of all the rehabilitation work areas included in an alteration exceeds fifty (50%) percent of the area of the building the work shall be considered as a reconstruction and shall comply with the requirements of Chapter 6 of this code for the applicable occupancy. **BFO** 

Exception: Rehabilitation work areas in which the alteration work is exclusively either plumbing, mechanical, fire protection system or electrical shall not be included in the computation of total area of all rehabilitation work areas.

- 501.3 All newly constructed elements, components and systems, including the installation of new elevators and boilers, shall comply with the requirements of the Building Code, Mechanical Code, Plumbing Code, NFPA 101 Life Safety Code for new construction, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, and Accessibility Code as applicable. BFO Exceptions:
- 1. Openable windows may be added without requiring compliance with the light and ventilation requirements of the Building Code.
- 2. Newly installed electrical equipment shall comply with the requirements of Section 504.0.

**501.4** The alteration work shall not make the building less conforming with the building, plumbing, mechanical, electrical or fire codes of the jurisdiction, or with alternative materials, design and methods of construction or any previously approved plans, modifications, alternate methods or compliance alternatives, than it was before the alteration was undertaken. **BFO** 

## **501.5 Interior Space Dimensions**

- **501.5.1** In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, other than a kitchen, they shall not be less than seven (7') feet in any plan dimension. **B**
- **501.5.2** In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, they shall have a ceiling height of not less than seven (7') feet. **B** *Exceptions*:
- 1. Beams, girders, ducts or pipes spaced not less than four (4') feet on center and projecting not more than six (6") inches below the required ceiling height.
- 2. For rooms with a sloped ceiling, the prescribed ceiling height is required for at least 35 square feet of the floor area of the room. Any portion of the room measuring less than five (5') feet from the finished floor to the finished ceiling shall not be considered usable floor area and shall not be included in any computation of the minimum area thereof.
- **501.5.3** In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, other than a kitchen, they shall have a net floor area of not less than 70 square feet. **B**

## **502.0** Structural Requirements

- **502.1 General:** Where alteration work includes installation of additional equipment that is structurally supported by the building or reconfiguration of space such that portions of the building become subjected to higher gravity loads as required by Tables 1607.1 and 1607.6 of the Building Code, the provisions of this section shall apply. **B**
- **502.2 Reduction of strength:** Alterations shall not reduce the structural strength or stability of the building, structure or any individual member thereof. **B** *Exception: Such reduction shall be allowed as long as the strength and the stability of the building are not reduced to below the Building Code requirements.*
- **502.3** New structural members: New structural members in alterations, including connections and anchorage, shall comply with the Building Code unless the authority having jurisdiction specifically allows replacement with like materials. **B**
- **502.4 Existing structural members:** Existing structural components supporting additional equipment or subjected to additional loads based on the Building Code Tables 1607.1 and 1607.6 as a result of a reconfiguration of spaces shall comply with Sections 502.4.1 through 502.4.3 of this Code. **B**

- **502.4.1 Gravity loads:** Existing structural elements supporting any additional gravity loads as a result of additional equipment or space reconfiguration shall comply with the Building Code. **B** *Exceptions:* 
  - 1. Structural elements whose stress is not increased by more than five (5%) percent.
- 2. Buildings of Group R occupancy with not more than five (5) dwelling units or guest rooms used solely for residential purposes where the existing building and its alteration comply with the conventional light-frame construction methods of the Building Code.
- **502.4.2** Snow drift loads: Any structural element of an existing building subjected to additional loads from the effects of snow drift as a result of additional equipment shall comply with the Building Code. **B**

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.
2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes where the existing building and its alteration comply with the conventional light-frame construction methods of the Building Code.

## 503.0 Accessibility

**503.1** Buildings undergoing an alteration that affects the usability of the building by persons with disabilities shall comply with Chapter 10 of this Code. **B** 

## 504.0 Electrical Equipment and Wiring

**504.1** All newly installed electrical equipment and wiring relating to work done in any rehabilitation work area shall comply with the materials and methods requirements as defined in Chapter 2. **B** 

Exception: Electrical equipment and wiring in newly installed partitions and ceilings shall comply with all applicable requirements of the Electrical Code.

- **504.2** Existing wiring in all rehabilitation work areas in Groups A-1, A-2, and A-5 (Theater, Assembly), shall be upgraded to meet the materials and methods requirements as defined in Chapter 2. **B**
- **504.3** Service and/or feeder in Group R-2: Service to each existing dwelling unit in any rehabilitation work area shall be a minimum of one hundred ampere, three-wire capacity, and service equipment shall be dead front having no live parts exposed whereby accidental contact could be made. **B**

Exception: Existing service of sixty-ampere three-wire capacity, and feeders of thirty ampere or larger two- or three-wire capacity, shall be accepted if adequate for the electrical load being served.

**504.3.1** Type "S" fuses shall be installed in accordance with Sections 240-53 and 240-54 of the Electrical Code when fused equipment is used. **B** 

- **504.4** In Group R-2, when the rehabilitation work area includes any of the following areas within a dwelling unit, the following requirements shall apply: **B**
- **504.4.1** All enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets or one duplex receptacle outlet and one ceiling or wall type lighting outlet. **B**
- **504.4.2** Kitchen areas shall have a minimum of two duplex receptacle outlets and a hard-wired lighting outlet. At least one of the required duplex receptacles shall be provided to serve counter space. **B**
- **504.4.3** Laundry areas shall have a minimum of one duplex receptacle outlet located near the laundry equipment and installed on an independent circuit. **B**
- **504.4.4** Ground fault circuit interruption shall be provided on newly installed receptacle outlets if required by Section 210-8(a) of the Electrical Code. **B**
- **504.4.5** At least one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage and detached garage with electric power, and to illuminate outdoor entrances and exits. **B**
- **504.4.6** At least one lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service. **B**
- **504.4.7** Clearance for electrical service equipment shall be provided in accordance with Section 110-16 of the Electrical Code. **B**
- **504.5** In Group R-2, when the rehabilitation work area includes spaces converted into kitchen or laundry areas, receptacle outlets in these areas shall comply with applicable requirements of Sections 210-52 (a), (b), (c), and (f) of the Electrical Code. **B**
- **504.6** Where the work changes an existing space where ground fault circuit interruption is not required into a location where such protection is required by Sections 210-8 (dwelling units, all bathrooms and rooftops), 555-3 (boathouses), 511-10 (commercial garages), 620-85 (elevators, escalators and moving walkways), 517-20 and 517-21 (health care facilities), 422-8(d)(3) (high-pressure spray washing appliances), 680-70 (hydromassage bathtubs), 530-73(a)(1) (motion picture and TV studios), and 680-6(a) (permanently installed pools) of the Electrical Code, existing receptacle outlets shall be provided with such protection in accordance with the Electrical Code. **B**

#### **505.0 Plumbing Fixtures**

**505.1** Where the rehabilitation work area is more than fifty (50%) percent of the gross floor area as defined in Section 1002 of the Building Code, and the occupant load will be increased by at least twenty (20%) percent as a result of the modification, plumbing fixtures shall be provided

based on the increased occupant load in the rehabilitation work area in quantities and locations specified in Section 403 of the Plumbing Code based on the increased occupant load. **B** 

#### 506.0 Mechanical

- **506.1** All reconfigured spaces intended for occupancy and all spaces converted to habitable or occupiable space in any rehabilitation work area shall be provided with either natural or mechanical ventilation. **B**
- **506.1.1** Natural ventilation shall be provided by the minimum openable area to the outdoors of four (4%) percent of the floor area being ventilated. **B**
- **506.1.2** Newly installed mechanical ventilation systems shall comply with the requirements of Section 403 of the International Mechanical Code. **B**

Exception: Existing mechanical ventilation systems shall comply with the requirements of Section 506.2.

- **506.2** In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured or extended shall be capable of providing not less than five (5)cubic feet per minute (cfm) per person of outdoor air and not less than fifteen (15) cfm of ventilation air per person. **B**
- **506.3** All newly-introduced devices, equipment or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities to adversely affect or impair health, or cause discomfort to occupants shall be provided with an exhaust system in compliance with Chapter 5 of the Mechanical Code or a means of collection and removal of the contaminants. Such exhaust shall discharge directly to an approved location at the exterior of the building. **B**

#### **507.0** Commercial Kitchens

**507.1** Where the rehabilitation work area includes a commercial kitchen and the alteration includes reconfiguration or extension of cooking equipment or the installation of additional cooking equipment, existing grease ducts, exhaust equipment, and kitchen hoods shall be brought into compliance with all the requirements in Sections 506 and 507 of the Mechanical Code and enforced by the Building Official. Jurisdiction for the suppression system for commercial cooking will be enforced solely by the fire official in compliance with NFPA 96 as referenced in the State Fire Code. **BF** 

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

# **Chapter 6 Reconstruction**

## **601.0 General Requirements**

**601.1** Reconstruction work is defined as the reconfiguration of a space which affects an exit, or a corridor shared by more than a single tenant; and/or reconfiguration of space such that the rehabilitation work area is not permitted to be occupied because existing means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained; and/or extensive alterations as defined in Chapter 5 of this code. All reconstruction work\_shall comply with the requirements of this chapter.

Exception: As modified in Section 904.0 for historical buildings.

- **601.2** In addition to the requirements of Chapter 6 of this code, all work shall comply with all the requirements of Chapters 4 and 5. **BF** *Exceptions:*
- 1. Buildings in which the reconfiguration of space affecting exits or shared egress access is exclusively the result of compliance with the accessibility requirements of Chapter 10 shall not be required to comply with Chapter 6.
- 2. Existing dead end corridors shall be permitted to be extended and new dead end corridors may be added in accordance with 602.1.5.
- 3. Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.
- **601.3** Wherever the term "rehabilitation work area" is used in Chapter 6, it is intended to include only the area affected by reconstruction work, and areas covered by non-structural requirements and extensive alterations. Other rehabilitation work areas affected exclusively by renovation or alteration work shall not be included in the rehabilitation work area that needs to comply with Chapter 6. **BFO**

## **602.0 Nonstructural Requirements**

## 602.1 Means of Egress F

- 602.1.1 General: The means of egress shall comply with the requirements of this section. F
- **602.1.2 Number of means of egress:** Every story utilized for human occupancy on which there is a rehabilitation work area shall be provided with the minimum number of means of egress required by NFPA 101, Life Safety Code, for existing occupancies. **F**

- **602.1.2.1 Mezzanines:** Mezzanines in the rehabilitation work area shall be provided with the minimum number of means of egress required by NFPA 101, Life Safety Code, for existing occupancies. **F**
- **602.1.2.2 Buildings with a single means of egress:** In buildings having only one means of egress, the single exit condition serving the rehabilitation work area shall be allowed to continue if permitted by the occupancy requirements of NFPA 101, Life Safety Code, for existing occupancies. **F**
- **602.1.2.3 Assembly occupancies:** Assembly occupancies shall be provided with a main entrance/exit as required by NFPA 101, Life Safety Code, for existing occupancies. **F**
- **602.1.2.4 Egress Stairways and Ramps:** Egress stairways and ramps shall meet the requirements of NFPA 101 for existing buildings except as allowed by the authority having jurisdiction in sections 102.3.1 and 601.2, exception 3. **F**
- **602.1.3** Capacity of means of egress: The capacity of the means of egress in each rehabilitation work area and throughout the egress path of each rehabilitation work area shall be sufficient for the occupant load thereof. Capacity shall be determined in accordance with the requirements of NFPA 101, Life Safety Code, for existing occupancies. **F** *Exceptions*:
- 1. The authority having jurisdiction shall be permitted to establish the occupant load as the number of persons for which existing means of egress is adequate, provided that measures are established to prevent occupancy by a greater number of persons.
- 2. Where the building was previously determined to have adequate egress capacity.

## 602.1.4 Egress Doorways

**602.1.4.1 Large areas:** In any rehabilitation work area, all rooms and spaces having an occupant load greater than 50 or in which the travel distance exceeds 75 ft (23 m) shall have a minimum of two egress doorways. **F** 

Exception: Where a single means of egress is permitted by the existing occupancy requirements in

NFPA 101, Life Safety Code.

- **602.1.4.2 Corridor doors:** Corridor doors in the rehabilitation work area shall meet the requirements for existing occupancies in NFPA 101, Life Safety Code. Existing doors in buildings protected throughout with an approved automatic sprinkler system shall be required only to resist smoke; shall not contain louvers; and shall be reasonably tight fitting. **F** *Exceptions:*
- 1. 13/8 in solid bonded wood core doors shall be considered acceptable where  $1\frac{3}{4}$  in (44 mm) solid bonded wood core doors are required but the existing frames will not accommodate such a door.
- 2. Existing doors meeting the requirements for a rating of 15 minutes or better.

- 3. In small residential board and care occupancies having prompt evacuation capability and which are protected with an approved automatic detection system, closing devices shall be permitted to be omitted.
- **602.1.4.3 Transom:** In all buildings of residential and residential board and care occupancies, all transoms in corridor walls in rehabilitation work areas shall be either glazed with ¼ in (6.3 mm) wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction. **F**

Exception: Where transoms are permitted by the existing occupancy requirements of NFPA 101, Life Safety Code.

- **602.1.4.4 Other corridor openings:** In any rehabilitation work area, any other sash, grill or opening in a corridor, and any window in a corridor not opening to the outside air, shall be sealed with materials consistent with the corridor construction. **F**
- **602.1.4.5 Supplemental requirements:** The requirements of 602.1.4.3 through 602.1.4.5 shall apply on the entire floor when the rehabilitation work area exceeds fifty (50%) percent of the floor area. **F**

Exception: Corridors within a tenant space that is entirely outside the rehabilitation work area need not comply.

- **602.1.4.6 Door swing:** In the rehabilitation work area and in the egress path from any rehabilitation work area to the exit discharge, all egress doors shall swing in the direction of egress travel unless it is determined by the authority having jurisdiction that re-swinging an exit discharge door would impose a structural hardship upon the owner, or impede exit access within, or pedestrian traffic outside, the subject building. **F**
- **602.1.4.7 Door closers:** In any rehabilitation work area all doors opening onto an exit passageway at grade or exit stair shall be self-closing or automatic-closing by listed closing devices. **F**

*Exception:* Where exit enclosure is not required by the fire code.

- **602.1.4.7.1 Locking Mechanisms:** All locking mechanisms on required egress or egress-access doors shall meet the requirements of NFPA 101 for existing buildings. **F**
- **602.1.4.8 Panic or fire exit hardware:** In any rehabilitation work area, and in the egress path from any rehabilitation work area to the exit discharge, in a building or portions thereof of assembly or educational occupancies with an occupant load greater than 100 all required egress doors equipped with latching devices shall be equipped with approved panic or fire exit hardware. **F**
- **602.1.4.9 Supplemental requirements:** The requirements of 602.1.4.6 through 602.1.4.8 shall apply on the entire floor when the rehabilitation work area exceeds fifty (50%) percent of the floor area. **F**

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

**602.1.5 Dead end corridors:** Existing dead end corridors in any rehabilitation work area shall not exceed 35 ft. (11 m). Newly constructed dead end corridors shall comply with other sections of this code. **F** 

Exceptions:

- 1. Where dead-end corridors of greater length are permitted by the existing occupancy requirements of NFPA 101, Life Safety Code.
- 2. In other than assembly occupancies and areas containing high hazard contents, the maximum length of an existing dead end corridor shall be 50 ft (15 m) in buildings equipped throughout with an approved complete automatic fire alarm system.
- 3. In other than assembly occupancies and areas containing high hazard contents, the maximum length of an existing dead end corridor shall be 70 ft (21 m) in buildings equipped throughout with an approved automatic sprinkler system.
- 4. In other than assembly occupancies and areas containing high hazard contents, the maximum length of a newly constructed or extended dead end corridor shall not exceed 50 ft (15 m) in buildings equipped throughout with an approved automatic sprinkler system.

# 602.1.6 Means of egress lighting

**602.1.6.1** Means of egress in all rehabilitation work areas shall be provided with artificial and emergency lighting in accordance with the requirements of NFPA 101, Life Safety Code, for existing occupancies. **F** 

#### **602.1.6.2** Supplemental requirements

(a) Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, means of egress throughout the floor shall be provided with artificial lighting in accordance with the requirements of other sections of this Code. **F** 

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

(b) In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, the means of egress within the rehabilitation work area and the means of egress, including the exit and exit discharge paths serving the rehabilitation work area, shall be provided with artificial lighting in accordance with the requirements of other sections of this Code. **F** 

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

## **602.1.7** Exit signs

**602.1.7.1** Means of egress in all rehabilitation work areas shall be provided with exit signs in accordance with the requirements of NFPA 101, Life Safety Code for existing occupancies. **F** 

## **602.1.7.2** Supplemental requirements:

- (a) Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, means of egress throughout the floor shall be provided with exit signs in accordance with the requirements of NFPA 101, Life Safety Code for new construction. **F** *Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.*
- (b) In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, means of egress from the floor of the highest rehabilitation work area to the floor of exit discharge shall be provided with exit signs in accordance with the requirements of other sections of NFPA 101, Life Safety Code for new construction. **F**

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

- **602.1.8 Handrails:** The following requirements shall apply from the highest rehabilitation work area floor to the level of exit discharge. **F**
- **602.1.8.1** Every required exit stairway that is part of the means of egress for any rehabilitation work area that has three or more risers and is not provided with at least one handrail, or in which the existing handrails are judged to be in danger of collapsing, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways with a required egress width of more than 66 in. (1675 mm) shall have handrails on both sides. **F**
- **602.1.8.2** Where there are no handrails or where the existing handrails must be replaced in accordance with 602.1.8.1, the handrails shall be designed and installed in accordance with the requirements of NFPA 101, Life\_Safety Code for new construction. **F**
- **602.1.9 Guards:** The following requirements shall apply from the highest rehabilitation work area floor to the level of exit discharge, but shall be confined to the egress path of any rehabilitation work area. **F**
- **602.1.9.1** Every open portion of a stair, landing, or balcony that is more than 30 in. (760 mm) above the floor or grade below and not provided with guards, or those in which the existing guards are judged to be in danger of collapsing, shall be provided with guards. **F**
- **602.1.9.2** Where there are no guards or where the existing guards must be replaced in accordance with 602.1.9.1, the guards shall be designed and installed in accordance with the requirements of NFPA 101, Life Safety Code for new construction. **F**

#### 602.2 Interior Finish

**602.2.1** The interior finish of walls and ceilings in any rehabilitation work area shall comply with the requirements for existing occupancies in NFPA 101, Life Safety Code. All existing interior finish materials which do not comply with the requirements of Chapter 6 of this code shall be removed or shall be treated with an approved fire retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this section. **F** 

## **602.2.2** Supplemental Requirements

**602.2.2.1** Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, the requirements of 602.2.1 shall apply to the interior finish in exits and corridors serving the rehabilitation work area on the entire floor. **F** 

Exception: Interior finish within a tenant space that is entirely outside the rehabilitation work area need not comply.

**602.2.2.2** In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, the requirements for interior finishes in exits shall apply from the floor of the highest rehabilitation work area to the floor of exit discharge. **F** 

#### 602.3 Shaft enclosures

602.3.1 In any rehabilitation work area, newly constructed vertical openings connecting two or more floors shall comply with the requirements of NFPA 101, Life Safety Code for new construction. All new shafts shall be continuous from floor to floor or floor to roof, including all affected areas that may be outside the rehabilitation work area. F

Exception: In buildings protected throughout by a fire alarm system installed in accordance with section-602.6 of this Code or an automatic suppression system in accordance with NFPA 13 or NFPA 13R the following is permitted:

In buildings constructed of other than 3B or 5B construction, where continuity of the shaft enclosure is unfeasible, interior vertical openings other than stairways or other egress components, may be enclosed from floor to ceiling with an approved fire rated assembly.

602.3.2 In any rehabilitation work area, all existing interior vertical openings connecting two or more floors shall be enclosed with approved assemblies in accordance with NFPA 101, Life Safety Code for existing construction. All shafts shall be continuous from floor to floor or floor to roof, including all affected areas that may be outside the rehabilitation work area. F Exceptions: In buildings protected throughout by a fire alarm system installed in accordance with section 602.6 of this code or an automatic suppression system in accordance with NFPA 13 or NFPA 13R the following is permitted:

In buildings constructed of other than 3B or 5B construction, where continuity of the shaft enclosure is unfeasible, interior vertical openings other than stairways or other egress components, may be enclosed from floor to ceiling with an approved fire rated assembly. In apartment buildings that are no more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint. In non-high rise apartment buildings that are more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly provided the building is protected throughout by a fire alarm system installed in accordance with section 602.6 of this code and the stairwells are protected with an automatic suppression system in

accordance with NFPA 13. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint.

In mixed-use buildings with apartments located above, that are no more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint.

In non-high rise mixed use buildings with apartments located above, that are more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly provided the building is protected throughout by a fire alarm system installed in accordance with section 602.6 of this code and the stairwells are protected with an automatic suppression system in accordance with NFPA 13. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint.

## **602.3.3** Supplemental requirements

- **602.3.3.1** Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, 602.3.2 shall apply throughout the floor. **F**
- **602.3.3.2** Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, stairways that are part of the means of egress serving the rehabilitation work area shall be enclosed with smoke tight enclosures on all floors below the highest rehabilitation work area floor. **F**

Exception: Where stairway enclosure is not required for existing occupancies in NFPA 101, Life Safety Code.

**602.3.3.3** In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, stairways that are part of the means of egress shall be enclosed in accordance with 602.3.2 on the highest rehabilitation work area floor and on all floors below it. **F** 

#### 602.4 Fire barriers and smoke barriers

- **602.4.1 Health care occupancies:** Where the rehabilitation work area is on a story used for sleeping purposes for more than 30 patients, the story shall be divided into not less than two compartments by smoke barriers as required for existing health care occupancies in NFPA 101, Life Safety Code. **F**
- **602.4.2 Small residential board and care:** Where the rehabilitation work area is in any attached dwelling unit in a small residential board and care occupancy, walls separating the dwelling units which are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the wall of the dwelling unit that is part of the rehabilitation work area. **BF**

*Exception:* Walls are not required to be continuous through concealed floor spaces.

## 602.5 Automatic sprinkler systems

**602.5.1** All rehabilitation work areas in any building or portion thereof that is required to be suppressed in accordance with the provisions of NFPA 101, Life Safety Code for existing buildings shall be provided with an automatic sprinkler system. **F** 

Exception: In other than high-rise structures, where an adequate water supply for sprinkler protection is not available, alternative protection measures that are acceptable to the authority having jurisdiction shall be permitted. For purposes of this exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi  $(138,000 \text{ N/m}^2)$  to meet the sprinkler system demand criteria.

# **602.5.2** Supplemental requirements

**602.5.2.1** Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, 602.5.1 shall apply to the entire floor. **F** 

Exception: In other than high-rise structures, where an adequate water supply for sprinkler protection is not available the authority having jurisdiction shall be permitted to accept alternative protection. For purposes of this exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi  $(138,000 \text{ N/m}^2)$  to meet the sprinkler system demand criteria.

- **602.5.2.2** In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate building area, automatic sprinkler systems shall be provided in accordance with requirements for new construction. This requirement shall apply to the highest floor containing a rehabilitation work area and all floors below. **F** *Exceptions:*
- 1. In other than high-rise structures, where an adequate water supply for sprinkler protection is not available, the authority having jurisdiction shall be permitted to accept alternative protection. For purposes of this exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi  $(138,000 \text{ N/m}^2)$  to meet the sprinkler system demand criteria.
- 2. Residential occupancies less than four stories in height and with no more than six units between fire walls.
- **602.5.3 Mixed uses:** In buildings containing mixed uses, one or more of which requires automatic sprinkler protection in accordance with 602.5.1 or 602.5.2, automatic sprinklers will not be required throughout the building, provided that the occupancies requiring automatic sprinklers are separated from those not requiring automatic sprinklers by fire-resistive construction having a minimum 2-hour rating for high hazard content areas, and a minimum 1-hour rating for all other conditions. **F**
- **602.5.4 Supervision** Automatic sprinkler systems required by 602.5 shall be supervised in accordance with NFPA -101 Life Safety Code for new construction and the fire alarm provisions of this code. **F**

Exception:

- 1. Underground gate valve with roadway boxes.
- 2. Halogenated extinguishing systems.
- 3. Carbon dioxide extinguishing systems.
- 4. Dry and wet chemical extinguishing systems.
- 5. Limited area sprinkler systems.
- 6. Residential occupancies complying with NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height.
- 7. Where supervision is not required for existing occupancies in NFPA 101, Life Safety Code.
- **602.5.5 Standpipes:** In a building more than three (3) stories in height or over fifty (50) feet in height above grade and containing intermediate stories or balconies, with rehabilitation work areas involving over fifty (50%) percent of the aggregate building area, a standpipe system shall be provided with standpipes up to and including the highest rehabilitation work area floor. The standpipes shall be located and installed in accordance with NFPA 14, Standard for the Installation of Standpipe, Private Hydrant, and Hose Systems. The standpipe system shall be designed to accommodate expansion to the entire building. **F**

## Exceptions:

- 1. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi  $(0.9 \text{ m}^3/\text{min} \text{ at } 448,000 \text{ N/m}^2)$  to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi  $(1.9 \text{ m}^3/\text{min} \text{ at } 448,000 \text{ N/m}^2)$  to the topmost floor in all other buildings. Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these flow/pressure requirements for possible future extension of the standpipe. 2. In other than high-rise buildings, the required interconnection of the standpipes for a wet system shall be permitted at the lowest level of the rehabilitation work area.
- **602.5.6 Elevator recall:** When sprinklers are installed in an elevator hoistway or elevator machine room as part of the rehabilitation work, the elevators shall comply with rule 211.3 of ASME/A17.1-1996, Safety Code for Elevators and Escalators. **O**
- **602.6 Fire alarm systems:** In buildings covered by this chapter, fire alarm systems are required as follows: **F**

#### Assembly (A-2 through A-5)

- (a) A fire alarm system as prescribed in R.I.G.L. 23-28.25-4(a), as amended, shall be installed in all Class "C" places of assembly (50 to 300 persons).
- (b) A fire alarm system as prescribed in R.I.G.L. 23-28.25-4(b), as amended, shall be installed in all Class "A" and "B" places of assembly (Class A, 1001 or more persons; Class B, 301 to 1000 persons).
- (c) In addition to the locations prescribed in R.I.G.L. 23-28.25 as amended, a manual alarm station shall be installed on every stage and near any fixed lighting control panel and any projection booth.
- (d) A one hundred thirty-five degrees F (135°) to one hundred forty degrees F (140°) rate of rise or fixed temperature detector shall be installed above all stage areas and below all accessible stage areas and projection booths.

#### **Hotels and Motels (R-1)**

A fire alarm system as prescribed in R.I.G.L. 23-28.25-4(b), as amended, shall be installed in every hotel. In addition, a visual alarm signal shall be installed in guest rooms specifically designed for persons with disabilities. A rate of rise and one hundred thirty-five degree (135°) to one hundred forty degree (140°) fixed temperature thermodetector and a local single station AC smoke detector shall be installed in every sleeping room.

Exception: Buildings no more than two (2) stories high where each guest room has a direct exit to the outside of the building shall have a fire alarm system as prescribed in R.I.G.L.23-28.25-4(a), as amended and a local single station AC smoke detector shall be installed in each sleeping room.

# **Boarding Homes (R-1)**

(a) A fire alarm system as prescribed in R.I.G.L. 23-28.25-4(b), as amended, shall be installed in every boarding house.

Exception: Buildings with accommodations for fewer than ten (10) persons shall have a fire alarm system as prescribed in R.I.G.L. 23-28.25-4(a), as amended.

(b) In addition, a local single station AC smoke detector shall be installed in each sleeping room with either system.

# **Rooming Houses (R-1)**

- (a) A fire alarm system as prescribed in R.I.G.L. 23-28.25-4(a), as amended, shall be installed in every rooming house.
- (b) In addition, a local single station AC smoke detector shall be installed in every sleeping room.

#### **Apartment House (R-2)**

- (a) Every apartment house shall have a fire alarm system installed as follows:
- (1) Buildings containing more than three (3) and less than eight (8) living units shall have a local fire alarm system as described in R.I.G.L. 23-28.25-4(a), as amended.
- (2) Buildings containing eight (8) or more living units shall have a fire alarm system as described in R.I.G.L. 23-28.25-4(b), as amended.
- (3) Buildings classified as high-rise (more than seventy-five feet (75') in height) shall have a fire alarm system as described in R.I.G.L. 23-28.25-4(c), as amended.
- (b) In addition, all living units shall have a smoke detection system as described in R.I.G.L. 23-28.34-2 23-28.34-4.

#### Industrial, Mercantile, Business, and Storage Building (F-1, F-2, M, B, S-1, S-2)

- (a) A fire alarm system as described in R.I.G.L. 23-28.25-4(a), as amended, shall be installed in all industrial, mercantile, business, and storage buildings.
- (b) A fire alarm system as described in R.I.G.L. 23-28.25-4(b), as amended, shall be installed in every industrial, mercantile, business, and storage building having a total floor area of more than ten thousand square feet (10,000 sq. ft.) per floor or extending three (3) stories or more above grade level.

## Theaters (A-1)

- (a) A fire alarm system as prescribed in R.I.G.L. 23-28.25-4(b), as amended, shall be installed in every theater.
- (b) In addition to the location prescribed in R.I.G.L. 23-28.25-4(b), as amended, a manual station shall be installed on every stage and near any fixed lighting control panel and in every projection booth.
- (c) Manual stations, with the approval of the authority having jurisdiction, may be omitted from exits and installed in such locations as the ticket booth or the refreshment stand.
- (d) Alarm sounding devices and flashing lights shall be installed where required by the authority having jurisdiction. Voice communication evacuation systems are required and shall interrupt all audio systems.

#### 602.6.1 Smoke alarms

- **602.6.1.1** In hotels and dormitories and apartment occupancies, individual guest rooms and individual dwelling units in any rehabilitation work area shall be provided with smoke alarms complying with the requirements for new construction. **F**
- **602.6.1.2** Where the reconstruction rehabilitation work area is in residential board and care occupancies and three-family dwellings, smoke alarms complying with the requirements for new construction shall be provided throughout the dwelling unit at each level and outside each sleeping area. **F**

Exceptions:

- 1. Interconnection of smoke detectors shall not be required outside of the rehabilitation work area
- 2. Battery-powered single station smoke detectors listed in accordance with UL 217, Standard for Safety for Single and Multiple Station Smoke Alarms, shall be permitted outside the rehabilitation work area.

#### 602.6.2 Local fire alarm systems

- **602.6.2.1** Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area and the rehabilitation work area is in a building that is required to have a local fire alarm system in accordance with section 602.6 of this code, a local fire alarm system shall be provided on the floor. Alarm-indicating appliances shall be provided on the floor and shall be automatically activated as required by R.I.G.L. 23-28.25-4(a) as amended. **F**
- **602.6.2.2** Where the rehabilitation work area involves over fifty (50%) percent of the aggregate building area and the rehabilitation work area is in a building that is required to have a local fire alarm system in accordance with other provisions of this Code, a local fire alarm system shall be provided throughout the building. **F**

#### 602.6.3 Supervised fire alarm systems

- **602.6.3.1** Where the rehabilitation work area is in a building that is required to have a supervised fire alarm system in accordance with section 602.6 of this code a supervised fire alarm system shall be installed in the rehabilitation work area. **F**
- **602.6.3.2** Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area and the rehabilitation work area is in a building that is required to have a supervised fire alarm system in accordance with section 602.6 of this code, the supervised fire alarm system shall be installed throughout the floor. **F**
- **602.6.3.3** Where the rehabilitation work area involves over fifty (50%) percent of the aggregate building area and the building is required to have a supervised fire alarm system in accordance with section 602.6 of this code, a supervised fire alarm system shall be provided throughout the building. **F**
- **602.7 High-rise buildings:** Any building or structure having one or more floors more than seventy-five (75') feet (23 m) above the lowest level accessible to a fire department vehicle shall comply with the high rise provisions of R.I.G.L. 23-28.25-4(c) as amended along with the requirements of this section. **F**
- **602.7.1 Re-circulating air or exhaust systems:** When the rehabilitation work area is on a floor that is served by a re-circulating air or exhaust system serving more than one floor, the recirculating air or exhaust system that serves the rehabilitation work area shall be equipped with approved smoke and heat detection devices installed in accordance with the mechanical code. The devices shall stop the fans automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. **BF**
- **602.7.2** Elevators: When the rehabilitation work area is one entire floor or when the rehabilitation work area is twenty (20%) percent or more of the occupied floor area of the building, the elevators in the building shall be equipped with the following emergency control devices: **BFO**
- (1) All automatic (non-designated attendant) elevators having a travel of 25 ft (7620 mm) or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME/ANSI A17.1-1987, Safety Code for Elevators and Escalators, Rules 211.3a and 211.3b.
- (2) All floors shall be accessible by at least one elevator equipped with Phase II Emergency In-Car Operation, as required by ASME/ANSI A17.1-1987, Safety Code for Elevators and Escalators, Rule 2.113c.
- (3) All designated attendant elevators having a travel of 25 ft (7620 mm) or more above or below the designated level shall be equipped with emergency controls, as required by ASME/ANSI A17.1-1987, Safety Code for Elevators and Escalators, Rule 211.4. (Elevator approvals by the Department of Labor and Training.) **BFO**

**602.7.3 Smoke barriers:** Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area and is on a floor that is above the main floor level in hotel and dormitory occupancies and apartment occupancies, smoke barriers shall conform to the requirements for existing occupancies in NFPA 101, Life Safety Code. **F** 

## 602.8 Boiler/furnace equipment rooms

**602.8.1** Boiler/furnace equipment rooms shall be enclosed by one-hour fire-rated construction when the rehabilitation work area is in a daycare occupancy or residential board and care occupancy. **BFO** 

Exceptions:

- 1. Furnace and boiler equipment of low pressure type [operating at pressures of 15 psig  $(103,000 \ N/m^2)$  or less for steam equipment, or 160 psig  $(1,100,000 \ N/m^2)$  or less for hot water equipment] when installed in accordance with manufacturer recommendations or furnace and boiler equipment of residential type [200,000 Btu/hour (210 MJ/hour) input rating or less] is not required to be enclosed.
- 2. Furnace rooms protected with automatic sprinkler protection.
- 3. Boiler/furnace equipment rooms protected in accordance with the Boiler Code. (Boilers over 200,000 BTU require approval by the Department of Labor and Training.)
- **602.8.2** Emergency controls shall be provided in all structures classified as a day-care occupancy or residential board and care occupancy in accordance with the following: **B**
- (1) Emergency shutoff switches for furnaces and boilers in basements shall be at the top of the stairs leading to the basement.
- (2) Emergency shutoff switches for furnaces and boilers in other enclosed rooms shall be located outside of the room.

#### 602.9 Structural

- **602.9.1 General:** Where buildings are undergoing reconstruction including structural alterations, the provisions of this section shall apply. **B**
- **602.9.2 Reduction of strength:** Reconstruction shall not reduce the structural strength or stability of the building, structure or any individual member thereof. **B** *Exception: Such reduction shall be allowed provided that the structural strength and the stability of the building are not reduced to below the Building Code levels.*
- **602.9.3** New structural members: New structural members in reconstructions including connections and anchorage, shall comply with the Building Code unless the authority having jurisdiction specifically allows replacement with like materials. **B**
- **602.9.4 Minimum design loads:** The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that no overstressed condition is created. **B**

- **602.9.5 Structural alterations:** Buildings and structures undergoing structural reconstruction shall comply with this section. **B**
- 602.9.5.1 Evaluation and analysis: An engineering evaluation and analysis which establishes the structural adequacy of the altered structure shall be prepared by a registered design professional and submitted to the code official where more than thirty (30%) percent, within a 12 month period, of the floor and roof areas of the building or structure have been or are proposed to be involved in structural alteration. The evaluation and analysis shall demonstrate that the building or the buildings' structural system once altered complies with the Building Code for wind loading. The areas to be counted towards the thirty (30%) percent shall be those areas tributary to the vertical load carrying components such as joists, beams, columns, walls and other structural components that have been or will be removed, added or altered, as well as areas such as mezzanines, penthouses, roof structures and infilled courts and shafts. B Exceptions:
- 1. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes altered based on the conventional light-frame construction methods of the Building Code.
- 2. Where such alterations involve only the lowest story of a building and change of occupancy provisions of Chapter 7 do not apply; only the lateral force resisting components in and below that story need comply with this section.
- **602.9.6** Additional vertical loads: Where gravity loading is increased on the roof or floor of a building or structure, all structural members affected by such increase in loading shall meet the gravity load requirements of the Building Code. **B**

Exceptions:

- 1. Structural elements whose stress is not increased by more than five (5%) percent.
- 2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes altered based on the conventional light frame construction methods of the Building Code.
- **602.9.7 Voluntary lateral force resisting system alterations:** Alterations of existing structural elements that are initiated for the purpose of increasing the lateral force resisting strength or stiffness of an existing structure, and are not required by other sections of this code, shall not be required to be designed for forces conforming to the Building Code provided that an engineering analysis is submitted to show that:
  - 1. The capacity of existing structural elements required to resist forces is not reduced;
- 2. The lateral loading to existing structural elements is not increased beyond their capacity;
- 3. New structural elements are detailed and connected to the existing structural elements as required by the Building Code;
- 4. New or relocated non-structural elements are detailed and connected to existing or new structural elements as required by the Building Code and
- 5. An imminent danger as defined in this code is not created. Voluntary alterations to lateral force resisting systems conducted in accordance with the referenced standards of the Building Code shall be permitted. **B**

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.
- "O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **Chapter 7 Change of Use and Occupancy**

#### 701.0 General

- **701.1 Applicable requirements:** Any repair, renovation, modification, or reconstruction work undertaken in connection with a change of character of use as outlined in Section 701.3.1 that does not involve a change of occupancy classification shall conform to the requirements of Chapters 3,4,5, and 6 respectively for the applicable occupancy classification. **BF**
- **701.2** Change of occupancy: The occupancy classification of an existing building or structure is defined as the classification of occupancies into groups in accordance with Section 302 of the Building Code as modified by Section 202.0 of this Code. The occupancy classification may be changed, provided the building or structure meets all the requirements of Chapter 6 applied throughout the building for the new occupancy classification, and the requirements of Chapter 7. **BF**

## Exceptions:

- 1. Compliance with all the provisions of Chapter 6 is not required where the change of use complies with the requirements of 701.11 of this code.
- 2. As modified in Chapter 904.0 for historical buildings.

#### 701.3 Special use and occupancy

- **701.3.1** Where the character of use of an existing building or part of an existing building is changed to one of the following special use or occupancy categories as defined in other sections of this Code, the building shall comply with all the applicable requirements of that chapter and the required provisions of NFPA 101, Life Safety Code, for new occupancies regardless of whether a change of occupancy classification is involved: **BF**
- (1) Covered mall buildings
- (2) Atriums
- (3) Private garages
- (4) Parking garages
- (5) Motion picture projection rooms
- (6) Stages and platforms

- (7) Special amusement buildings
- **701.3.2** An underground building, as defined in Section 405 of the Building Code, in which there is a change of occupancy shall comply with the requirements of Section 405 of the Building Code and the required provisions of NFPA 101, Life Safety Code for new construction applicable to underground structures. **BF**

# 701.3.3 Living and Work Quarters for Artists

- **701.3.3.1** Where the character of use of an existing building or part of an existing building is changed to artist-in-residence spaces the building or part of the building shall comply with the requirements of this Section. **B**
- **701.3.3.2** Not over thirty-three (33%) percent of an artist-in-residence space shall be used or arranged for residential purposes such as sleeping area, kitchen, bathroom and closet areas. The minimum area of an artist-in-residence space shall be 750 square feet. A separation between the working space and the residential portion shall not be required. **B**
- **701.3.3.3** An artist-in-residence space shall not be used for public sales purposes or for instructional classes. No hazardous activity such as, but not limited to, welding, open flame, or storage of flammable liquids shall occur in an artist-in-residence space without specific written approval from the authority having jurisdiction (Fire Official) that the hazardous activity meets the requirements of the Rhode Island Fire Prevention Code. **BF**
- **701.3.3.4** Number of exits: The occupant load of an artist-in-residence space shall be based on one occupant per 750 square feet. Two exits shall be required from each space. **BF**
- **701.3.3.5 Fire escapes:** An existing or newly constructed fire escape complying with the requirements of section 7.2.8 of the NFPA 101 Life Safety Code for new construction, or as approved by the Fire Marshal and Building Commissioner, shall be accepted as providing one of the required means of egress. **FB**
- **701.3.3.6 Sleeping room emergency exit:** The emergency egress from sleeping rooms as required by this code may be provided from appropriately sized windows in accordance with section 24.2.2.3 of NFPA 101 Life Safety Code for new construction in the artist-in-residence working space provided no locking mechanism prevents access to the emergency egress window. **F**
- **701.3.3.7 Smoke detectors:** Permanently wired smoke detectors shall be installed as required by 602.6 of this code in the residential portion of artist-in-residence spaces. In the working space portion of the artist-in-residence space, one permanently wired smoke detector shall be installed on the ceiling. Where the working space is subdivided into separate rooms, one permanently wired smoke detector shall be installed on the ceiling of each such subdivided working room. Where the residential portions of an artist-in-residence space does not have at least one direct means of egress to an exit without passing though the artist-in-residence working space, the working space shall be provided with permanently wired smoke detectors installed in accordance

with the manufacturers installation instructions, but at not over 30 feet on center on the ceiling. When more than one permanently wired smoke detector is required in an artist-in-residence space, all smoke detectors shall be interconnected so that activation of any smoke detector sounds all the smoke detectors within the space. **F** 

- **701.3.3.8 Corridors:** Existing exit access corridor walls shall consist of fire barriers in accordance with 31.3.6 of NFPA 101, Life Safety Code for existing construction that have not less than a 1/2-hour fire resistance rating. Newly constructed exit access corridor walls shall consist of fire barriers in accordance with 30.3.6 of NFPA 101, Life Safety Code for new construction. **F**
- **701.3.3.9 Shaft enclosures:** Where artist-in-residence spaces are located on a floor, all existing interior vertical openings connecting two or more floors shall be enclosed in accordance with 602.3 of this Code, and shall be classified as Apartments (R-2) for purposes of its exceptions. **F**
- **701.3.3.10 Light and ventilation:** Light and ventilation requirements for habitable spaces shall apply to the actual habitable space provided or, if not physically separated from the artist's working area, to thirty-three (33%) percent of the entire artist-in-residence space. Light for habitable rooms may be provided by means of required sized windows in the artist working space, provided that windows face the habitable rooms and any partitions separating the working space from the habitable rooms contain transparent material with an area fifty (50%) percent greater in area than the habitable room's window area required by this code. **B**
- **701.3.3.11** Toilet, shower and bath: Artist-in-residence spaces may share a code-required toilet, shower or bath space, provided each artist-in-residence space has direct access to the toilet, shower or bath from a public corridor. **B**
- **701.3.3.12 Electrical:** In the habitable residential portion of an artist-in-residence space electrical equipment and wiring shall comply with the requirements for Group R-2 specified in 504.4 and 504.5 of this code. In an un-subdivided artist-in-residence space only five receptacle outlets shall be required. The habitable residential portion of an artist-in-residence space may be provided with a minimum 30 ampere service. Electrical service, lighting and outlets for the workspace in an artist-in-residence space shall be as specified in the Electrical Code. **B**
- **701.3.3.13 Elevators:** An elevator need not be provided when establishing an artist-in-residence space. **B**

## 701.4 Plumbing Requirements

**701.4.1** Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements in accordance with the Plumbing Code, or to increased water supply requirements in accordance with the Plumbing Code, the intent of the respective Plumbing Code provisions shall be complied with. **B** 

- **701.4.2** If the new occupancy is a food handling establishment, all existing sanitary waste lines above the food or drink preparation, storage, display or serving areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines, as opposed to replacement lines, shall not be installed above such areas. **B**
- **701.4.3** If the new occupancy will produce grease or oil laden wastes, it shall be provided with interceptors as required in Sections 6.2 and 6.3 respectively of the Plumbing Code. **B**
- **701.4.4** If the new occupancy will produce chemical wastes, approval shall be obtained from the Department of Environmental Management and all other authorities with jurisdiction over chemical waste. **BO**
- **701.5 Mechanical requirements**: Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to different kitchen exhaust requirements or to increased mechanical ventilation requirements in accordance with Chapter 5 and Section 403 respectively of the Mechanical Code, the intent of the respective Mechanical Code provisions, as articulated in paragraph 101.3 of the Mechanical Code, shall be complied with. In addition, whenever hoods, ductwork, or exhaust fans for kitchen exhaust systems are installed or replaced, the installation shall be in accordance with the Mechanical Code enforced by the Building Official. Jurisdiction for the suppression system for commercial cooking will be enforced solely by the local Fire Official in compliance with NFPA 96 as referenced in the State Fire Code. **BF**

## **701.6 Electrical Requirements**

**701.6.1** Where the occupancy of an existing building or part of an existing building is changed to one of the following special occupancies as described in Chapter 5 of the Electrical Code, the electrical wiring and equipment of the building or portion thereof that contains the proposed occupancy shall comply with all applicable requirements of the Electrical Code. **B** 

hazardous (classified) locations,
commercial garages, repair and storage,
aircraft hangars,
gasoline dispensing and service stations,
bulk storage plants,
spray application, dipping and coating processes,
places of assembly,
theaters, audience areas of motion picture and television studios and similar locations,
motion picture and television studios and similar locations,
motion picture projectors, and
agricultural buildings.

**701.6.2** Where the occupancy of an existing building or part of an existing building is changed, all unsafe electrical\_conditions, as determined by the authority having jurisdiction, shall be

corrected, without requiring that all parts of the electrical system be brought into compliance with the Electrical Code. **B** 

**701.6.3** Where the occupancy of an existing building or part of an existing building is changed to a residential occupancy, other than hotel and dormitory occupancies, or a residential board and care occupancy, electrical service shall be upgraded to meet the requirements of Article 220 of the National Electrical Code for the new occupancy. **B** 

## 701.7 Part Change of Occupancy Classification

**701.7.1** Where a portion of an existing building is changed to a new occupancy classification, and that portion is not separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications or with approved compliance alternatives, the entire building shall comply with all the requirements of Chapter 6 applied throughout the building for the new occupancy classification, and with the requirements of this Chapter. **BF** 

Exception: Compliance with all the provisions of Chapter 6 is not required when the change of occupancy complies with the requirements of Section 701.11.

- **701.7.2** Where a portion of an existing building is changed to a new occupancy classification, and that portion is separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications, or with approved compliance alternatives, the portion changed shall comply with all the requirements of Chapter 6 for the new occupancy classification, and with the requirements of this Chapter. **B**Exception: Compliance with all the provisions of Chapter 6 is not required when the change of occupancy complies with the requirements of Section 701.11.
- **701.8** Certificate of occupancy: Every change of occupancy to one classified in a different occupancy classification shall require a new certificate of occupancy in accordance with this Code regardless of whether any renovations, alterations, or reconstruction work are required by this code. **B**

## 701.9 Accessibility:

- **701.9.1** Where the occupancy of an existing building or part of an existing building is changed, and where renovation, alteration or reconstruction work is to be carried out, the requirements of Chapter 10 of this Code for the new occupancy shall be complied with. **B**
- **701.9.2** Where the occupancy of an existing building or part of an existing building is changed, and where no work is being performed, compliance with the Accessibility Code is not required. **B**

- **701.10** Hazard category classifications: The relative degree of hazard between different occupancy classifications shall be as set forth in the hazard category classifications, Tables A through C of Section 702. **BF**
- **701.10.1** An existing building or portion thereof may have its use changed to an occupancy classification within the same hazard classification category or to an occupancy classification in a lesser hazard classification category (higher number) in all three hazard category classifications designated in Tables A, B, and C of this chapter except the highest classification, provided it complies with the provisions of Chapter 6 for the new occupancy classification applied throughout the building, or portion thereof in accordance with section 701.7.2, and with sections 703.2 (Live Loads) and 703.3 (Vertical Loads on Roofs), and section 704.0 (Handrails and Guards). A fire alarm system shall be installed in accordance with section 602.6 of this Code. **BF**

Exception: Compliance with all the provisions of Chapter 6 is not required where the change of occupancy complies with the requirements of section 701.11.

- **701.10.2** An existing building shall comply with all the applicable requirements of NFPA 101, Life Safety Code for new construction, when a change in occupancy will place it in a higher hazard category. **BF**
- **701.10.3** An existing building may have its occupancy classification changed to a higher hazard rating (lower number) in all three hazard category classifications designated in Tables A, B, and C of this chapter provided it complies with this Chapter or with Section 3409 of the Building Code and section 701.10.2 of this Code. **BF**
- **701.11** Change of occupancy to an equal or lesser hazard: A change of use to an occupancy classification within the same hazard classification category or to an occupancy classification in a lesser hazard classification category (higher number) in the three hazard category classifications addressed by Tables A, B and C of this chapter shall be permitted in an existing building or portion thereof provided the provisions of this section are met. **BF**
- **701.11.1** Regardless of the occupancy classification involved, the following requirement shall be met: **BF**
- 1. The capacity of the means of egress shall comply with section 602.1.3 of this code.
- 2. The interior finish of walls and ceilings shall comply with the requirements of section 602.2.2 of this code.
- 3. The high-rise building requirements of NFPA 101, Life Safety Code for existing buildings shall apply throughout the building.
- 4. The boiler/furnace requirements of NFPA 101, Life Safety Code for existing buildings shall apply throughout the building.
- 5. The fire alarm provisions of section 602.6 of this Code for the new occupancy classification shall apply\_throughout the building.
- **701.11.2** Where the new use is classified as Group R-1, or R-2, the following requirement shall be met throughout the building:

Corridor doors shall comply with the requirements of Sections 602.1.4.2 through 602.1.4.5. F

- **701.11.3** No dwelling unit of a residential occupancy classified as Group R-1 or R-2 shall have its sole means of egress pass through any nonresidential occupancy in the same building. **F**
- **701.11.4** No multiple-dwelling unit of a residential occupancy classified as Group R-1 or R-2 shall be located above any nonresidential occupancy. **F** *Exceptions:*
- 1. Where the dwelling unit of the residential occupancy and exits therefrom are separated from the nonresidential occupancy by construction having an approximate fire resistance rating of one (1) hour as approved by the authority having jurisdiction.
- 2. Where the nonresidential occupancy is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7 of NFPA 101, Life Safety Code for new construction.
- **701.11.5** Where the new use is classified as an apartment building (Group R-2), the following requirements shall be met: **F**

The smoke alarm requirements of Section 602.6 shall be met.

Buildings containing more than three (3) and less than eight (8) living units shall have a local fire alarm system as described in section 23-28.25-4(a), as amended, of the Rhode Island Fire Safety Code installed throughout the entire building.

Buildings containing eight (8) or more living units shall have a fire alarm system as described in section 23-28.25-4(b), as amended, of the Rhode Island Fire Safety Code installed throughout the entire building.

Buildings classified as high-rise (more than seventy-five feet (75') in height) shall have a fire alarm system as described in section 23-28.25-4(c), as amended, of the Rhode Island Fire Safety Code installed throughout the entire building.

- **701.11.6** When a change of use or occupancy occurs throughout an entire building, a fire alarm system shall be installed throughout the building in accordance with section 602.6 of this Code.
- **701.11.7** When a change of use or occupancy occurs in a portion of a building, if that portion is not separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications, a fire alarm system shall be installed throughout the entire building in accordance with section 602.6 of this Code for the most hazardous occupancy classification. **F**
- **701.11.8** When a change of use or occupancy occurs in a portion of a building, and that portion is separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications, a fire alarm system shall be installed in that portion of the building where the use or occupancy changed. The fire alarm system shall be installed in accordance with section 602.6 of this Code and the system shall be designed to accommodate expansion to the entire building. **F**

**701.11.9** When a change of occupancy includes a commercial kitchen, existing grease ducts, exhaust equipment and kitchen hoods shall be brought into compliance with all the requirements in Sections 506 and 507 of the Mechanical Code and enforced by the Building Official. Jurisdiction for the suppression system for commercial cooking will be enforced solely by the local Fire Official in compliance with NFPA 96 as referenced in the State Fire Code. **BF** 

# **702 Change of Occupancy**

# 702.1 Means of Egress/General F

# Table A HAZARD CATEGORIES AND CLASSIFICATIONS: LIFE SAFETY AND EXITS

Relative Hazard	Occupancy Classification	
1 (highest hazard)	High hazard contents	
2	Health care, detention and correctional, residential board and care	
3	Assembly, educational, day care, ambulatory health care, residential, mercantile, business, industrial, storage	

**702.1.1** When a change of occupancy classification is made to a higher hazard category (lower number) as shown in Table A, egress capacity, arrangement of the means of egress, and all elements of the means of egress, including but not limited to the exit access, exit discharge, occupant load, corridors, doors, enclosures, stairs and ramps, guards and handrails, means of egress doorways, fire escapes and exit lighting and signs, shall comply with the applicable requirements of the NFPA 101, Life Safety Code for new construction for the new occupancy classification. **F** 

Exception: Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements of new stairs.

**702.1.2** When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table A, existing elements of the means of egress shall comply with the requirements of Section 602.0 for the new occupancy classification. **F** *Exception: Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.* 

#### **702.2** Enclosure of Vertical Shafts

- **702.2.1 General:** Vertical shafts shall be designed to meet the NFPA 101, Life Safety Code for new construction requirements for atriums, or the requirements of this Section. **F**
- **702.2.2 Stairways**: When a change of occupancy classification is made to a higher hazard category as shown in Table A, interior stairways shall be enclosed as required by NFPA 101, Life Safety Code for new construction. **F**
- **702.2.3 Shafts enclosing commercial kitchen exhaust ducts:** When a change of occupancy classification is made to a higher hazard category as shown in Table A, shafts enclosing commercial kitchen exhaust ducts shall be enclosed as required by NFPA 101, Life Safety Code for new construction. **F**
- **702.2.4 Other vertical shafts:** Interior vertical shafts other than stairways and those enclosing commercial kitchen exhaust ducts, including but not limited to elevator hoistways and service and utility shafts, shall be enclosed as required by NFPA 101, Life Safety Code for new construction when there is a change of occupancy classification to a higher hazard category in Table A. When the change of occupancy is to an equal or lesser hazard category, all newly constructed vertical openings, not addressed in section 702.2, shall comply with the provisions of section 602.3.1 of this code. When the change of occupancy is to an equal or lesser hazard category, all existing vertical openings, not addressed in section 702.2 shall comply with section 602.3.2 of this code. **BF**

## Exceptions:

- 1. Existing one-hour interior shaft enclosures shall be accepted where a higher rating is required.
- 2. Vertical openings, other than stairways, need not be enclosed if the entire building is provided with an approved automatic sprinkler system.
- 3. Where one-hour fire-resistive floor construction is required, vertical shafts need not be enclosed where floor penetrations are fire stopped at every floor level.
- **702.2.5 Openings:** All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire-protection rating of not less than one hour and shall be maintained self-closing or shall be automatic closing by actuation of a smoke detector. All other openings shall be fire protected in an approved manner. Existing fusible link-type automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135° F. (75° C.). **F**
- **702.3 Automatic sprinkler systems:** Any change of occupancy, reconstruction and/or addition shall comply with the following automatic sprinkler system requirements. Section 602.5 shall be used to determine the extent of sprinkler protection required using the area that has changed occupancy as the rehabilitation work area. **F**

**High-rise buildings:** All high-rise buildings shall be protected by an automatic sprinkler system in accordance with 11.8.2.1 of NFPA 101, Life Safety Code for new construction. **F** 

**Assembly (A1 through A-5):** Any assembly occupancy required by Table 12.1.6 of NFPA 101 Life Safety Code for new construction, or buildings containing assembly occupancies with occupant loads of more than 300, shall be protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7 of NFPA 101, Life Safety Code for new construction as follows: **F** 

- (1) Throughout the story containing the assembly occupancy
- (2) Throughout all stories below the story containing the assembly occupancy
- (3) In the case of an assembly occupancy located below the level of exit discharge, throughout all stories intervening between that story and the level of exit discharge, including the level of exit discharge

# Exceptions:

- 1. This requirement shall not apply to assembly occupancies used primarily for worship with fixed seating and not part of a mixed occupancy. (See 6.1.14 of NFPA 101, Life Safety Code for new construction.)
- 2. This requirement shall not apply to assembly occupancies consisting of a single multipurpose room of less than  $12,000 \, \text{ft}^2$  ( $1100 \, \text{m}^2$ ) that are not used for exhibition or display and are not part of a mixed occupancy.
- 3. This requirement shall not apply to gymnasiums, skating rinks, and swimming pools used exclusively for participant sports with no audience facilities for more than 300 persons.
- 4. In stadia and arenas, sprinklers shall be permitted to be omitted over the floor area used for contest, performance, or entertainment; over the seating areas; and over open-air concourses where an approved engineering analysis substantiates the ineffectiveness of the sprinkler protection due to building height and combustible loading.
- 5. In unenclosed stadia and arenas, sprinklers shall be permitted to be omitted in the following areas:
- (a) Press boxes less than  $1000 \text{ ft}^2$  (93 m<sup>2</sup>)
- (b) Storage facilities less than  $1000 \, \text{ft}^2$  (93 m<sup>2</sup>) if enclosed with not less than 1-hour fire resistance-rated construction
- (c) Enclosed areas underneath grandstands that comply with 12.4.8.5 of NFPA 101, Life Safety Code for new construction.

**Lodging or rooming houses (R-1):** Lodging or rooming houses shall be protected throughout by an approved automatic sprinkler system in accordance with 26.3.5.1 of NFPA 101, Life Safety Code for new construction. **F** 

Exception: Where every sleeping room has a door opening directly to the outside of the building at street or ground level, or has a door opening directly to the outside leading to an exterior stairway that meets the requirements of 26.2.1.1 of NFPA 101, Life Safety Code for new construction.

Hotels and dormitories (R-1): All buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 28.3.5.1 through 28.3.5.4 of NFPA 101, Life Safety Code for new construction. F

Exception: Buildings other than high-rise buildings, where all guest sleeping rooms have a door that opens directly to the outside at street or ground level, or to exterior exit access arranged in accordance with 7.5.3 of NFPA 101, Life Safety Code for new construction.

**Apartment buildings (R-2)**: All buildings, with sleeping accommodations above the third floor and/or having more than six units between fire walls, shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 30.3.5.1 through 30.3.5.5 of NFPA 101, Life Safety Code for new construction, except in buildings where every dwelling unit is provided with the following: **F** 

(a) An exit door opening directly to the street or yard at ground level.

# Mercantile (M): Mercantile occupancies shall be protected by an approved automatic sprinkler system in accordance with Section 9.7 of NFPA 101, Life Safety Code for new construction as follows: F

- (1) Throughout all mercantile occupancies three or more stories in height
- (2) Throughout all mercantile occupancies exceeding 12,000 ft<sup>2</sup> (1115 m<sup>2</sup>) in gross area
- (3) Throughout stories below the level of exit discharge where such stories have an area exceeding
- 2500 ft<sup>2</sup> (230 m<sup>2</sup>) used for the sale, storage, or handling of combustible goods and merchandise (4) Throughout mixed occupancies in accordance with 6.1.14 of NFPA 101, Life Safety Code for new construction where the conditions of 36.3.5.1(1), (2), or (3) of NFPA 101, Life Safety Code for new construction apply to the mercantile occupancy

Automatic sprinkler systems in Class A mercantile occupancies shall be supervised in accordance with 9.7.2 of NFPA 101, Life Safety Code for new construction. Exception: In other than high-rise structures, where an adequate water supply for sprinkler protection is not available, the authority having jurisdiction shall be permitted to accept alternative protection. For purposes of this exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi to meet the sprinkler system demand criteria.

#### 702.4 Heights and Areas

# Table B HAZARD CATEGORIES AND CLASSIFICATIONS: HEIGHTS AND AREAS

Relative Hazard	Occupancy Classification
1 (highest hazard)	High hazard contents
2	Assembly, day care, health care, ambulatory health care, detention and correctional, large residential board and care
3	Educational, residential, small residential board and care, mercantile, business, industrial, storage

- **702.4.1** Where a change of occupancy classification is made to a higher hazard category as shown in Table B, heights and areas of buildings and structures shall meet the limitations of Chapter 5 of the Building Code for the new occupancy classification. **B**
- **702.4.2** When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table B, the height and area of the existing building shall be deemed to be acceptable. **B**
- **702.4.3 Fire separation:** When a change of occupancy classification is made to a higher hazard category as shown in Table B, fire barrier walls or horizontal assemblies or both in mixed use buildings shall comply with the requirements for mixed occupancies in Section 302.3 of the Building Code. **BF**

Exception: Where the fire barrier walls are required to have a one-hour fire-resistance rating, existing wood lath and plaster in good condition or existing stud wall clad in 1/2-inch-thick (12.7 mm) gypsum wallboard or other equivalent assemblies shall be permitted.

## 702.5 Exterior Wall Fire-Resistance Ratings

Table C
HAZARD CATEGORIES AND CLASSIFICATIONS:
EXPOSURE OF EXTERIOR WALLS

Relative Hazard	Occupancy Classification	
1 (highest hazard)	Occupancies containing exempt amounts greater than permitted by section 417.0 of the Building Code	
2	Mercantile, industrial and storage occupancies with ordinary hazard contents	
3	Assembly, educational, day care, health care, ambulatory health care, detention and correctional, residential, residential board and care, and business	

**702.5.1** Where a change of occupancy classification is made to a higher hazard category as shown in Table C, exterior walls shall have fire-resistance and exterior opening protectives as required in Chapter 7 of the Building Code. This provision shall not apply to walls at right angles to the property line. **BF** 

Exception: Where a fire-resistance rating greater than two hours is required for a building of any type of construction, existing noncombustible exterior walls having a fire resistance rating equivalent to two hours as determined by HUD Guideline on Fire Ratings of Archaic Materials

and Assemblies or other approved sources shall be accepted, provided the building does not exceed three stories in height and is classified as one of the following Groups: A-3 with an occupant load of less than 300, B, F, M, or S.

- **702.5.2** When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table C, existing exterior walls, including openings, shall be accepted. **F**
- **702.5.3 Opening protectives:** Openings in exterior walls shall be protected as required by the Building Code. When openings in the exterior walls are required to be protected due to distance from the property line, the sum of the area of such openings shall not exceed fifty (50%) percent of the total area of the wall in each story. **BF** *Exceptions:* 
  - 1. Where the Building Code permits openings in excess of fifty (50%) percent.
- 2. Existing openings shall not be required to be protected in buildings of Group R which do not exceed three stories in height and which have a fire separation distance of at least 3 feet (914mm).
- 3. Where exterior opening protectives are required, an automatic sprinkler system throughout may be substituted for opening protection.
- 4. Exterior opening protectives are not required when the change of occupancy is to an equal or lower hazard classification in accordance with Table C.
- 703.0 Structural Requirements
- **703.1** Structural safety: In addition to the requirements of Sections 701 and 702, a change in occupancy classification shall comply with the requirements of this section. **B**
- **703.2** Live loads: Any existing structure in which the proposed new occupancy requires floor live loads equal to or less than required for the existing occupancy is permitted to be continued in use for the originally approved live loads, provided that the structure is not dangerous and is adequate for the proposed occupancy. If the approved floor live load is less than required by Section 1607 of the Building Code, the areas designed for the reduced live load shall be posted with the approved load or shall be structurally strengthened to support the new load. Placards shall be of an approved design. **B**

Exception: Analysis and test methods for evaluation of existing materials shall be permitted to use the methods specified in the code under which the building was constructed, the current Building Code, or other standards as approved by the authority having jurisdiction [building official].

- **703.3 Vertical loads on roofs:** Buildings and structures shall comply with the roof load requirements of Section 1607.11 of the Building Code for roof live load. **B** *Exception: Existing roofs shall be permitted to be retained provided any unsafe or overloaded conditions are corrected and where the roof dead load is not increased by use, re-roofing or added equipment.*
- **703.4 Wind and snow loads:** Where a change of occupancy results in an existing building being assigned a higher wind load or snow load importance factor in accordance with Table

1604.5 of the Building Code, the building shall be strengthened to meet the wind load or snow load requirements of Sections 1609 and 1608, respectively, of the Building Code. **B** 

#### 704.0 Handrails and Guards

- **704.1 Handrails:** Existing handrails shall comply with the handrail requirements in Section 602.0. **F**
- **704.2 Guardrails:** Existing guardrails shall comply with the guardrail requirements in Section 602.0. **F**

# 705.0 Health and Hygiene

**705.1 Light and ventilation:** Lighting and ventilation shall comply with the requirements of Sections 1204 and 1202 respectively of the Building Code for the new occupancy classification to the extent deemed practical by the authority having jurisdiction. **B** 

## **706.0 Energy Conservation**

**706.1** A change of use that would require an increase in space conditioning energy use in an existing building or structure that was constructed under an Energy Code shall not be permitted unless such building or structure is made to comply with the thermal envelope requirements of the Energy Code under which it was constructed for the new Use Group. **B** 

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.
- "O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## Chapter 8. Additions

## 801.0 General Requirements

**801.1** An addition to a building or structure is defined as an increase in building area, aggregate floor area, height or number of stories of a structure. All additions shall comply with other sections of this Code, Mechanical Code, Plumbing Code, Fire Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, and Accessibility Code, without requiring the

existing building or structure to comply with any requirements of those codes or of this Code. **BF** 

- 801.2 An addition shall not create or extend any non-conformity in the existing building to which the addition is constructed with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing or electrical systems. **BF**
- **801.3** Any repair, renovation, alteration or reconstruction work within an existing building to which an addition is being made shall comply with the requirements of Chapters 3,4,5 and 6 respectively of this Code. **BF**

# 802.0 Heights and Areas

**802.1** No addition shall increase the height or area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the Building Code for new buildings unless fire separation as required in the Building Code is provided. **B** 

Exception: Infilling of floor openings, non-occupiable appendages such as elevator and exit stair shafts, and the addition of mezzanines and equipment penthouses shall be permitted beyond that permitted by the Building Code.

# **803.0 Fire Protection Systems**

- **803.1** Existing compartment areas increased by the addition shall be protected with an approved automatic sprinkler system. **F**
- **803.1.1** All additions shall meet the automatic sprinkler system requirements of NFPA 101, Life Safety Code for new construction. **F**
- **803.1.2** All additions shall have the required fire alarm system installed. Use section 602.6 of this Code to identify the required fire alarm system for the various occupancy classifications. **F**
- **803.1.3** Whenever an addition constitutes an increase in area that is equal to the square footage of the original building, the fire alarm system for the addition shall be extended throughout the existing building, unless the addition is separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a minimum fire-resistance rating of one hour. **F**

#### 804.0 Structural

- **804.1** Compliance with the Building Code: Additions to existing buildings or structures are new construction and shall comply with the Building Code. **B**
- **804.2** Additional gravity loads: Existing structural elements supporting any additional gravity loads as a result of additions shall comply with the Building Code. **B**

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.

- 2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes where the existing building and the addition comply with the conventional fight-frame construction methods of the Building Code.
- **804.3** Lateral force resisting system: The lateral force resisting system of existing buildings to which additions are made shall comply with sections 804.3.1, 804.3.2 and 804.3.3 of this Code. **B**

Exceptions:

- 1. In Type V construction, Group R occupancies where the lateral force story shear in any story is not increased by more than ten (10%) percent.
- 2. Buildings of Group R occupancy with no more than 5 dwelling units or guestrooms used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the Building Code.
- 3. Additions where the lateral force story shear in any story is not increased by more than five (5%) percent.
- **804.3.1 Vertical addition:** Any element of the lateral force resisting system of an existing building subjected to an increase in vertical or lateral loads from the vertical addition shall comply with the lateral load provisions of the Building Code. **B**
- **804.3.2** Horizontal addition: Where horizontal additions are structurally connected to an existing structure, all lateral force resisting elements of the existing structure affected by such addition shall comply with the lateral load provisions of the Building Code. Lateral loads imposed on the elements of the existing structure and the addition shall be determined by a relative stiffness analysis of the combined structure including torsional effects. **B**
- **804.3.3** Voluntary addition of structural elements to improve lateral force resisting system: Voluntary addition of structural elements to improve the lateral force resisting system of a building shall comply with section 602.9.6. **B**
- **804.4** Snow drift loads: Any structural element of an existing building subjected to additional loads from the effects of snow drift as a result of an addition shall comply with the Building Code. **B**

Exceptions:

- 1. Structural elements whose stress is not increased by more than five (5%) percent.
- 2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the Building Code.

#### **804.5 Flood hazard areas:** In flood hazard areas:

- 1. For horizontal additions that are structurally interconnected to the existing building:
- 1.1 If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with the flood hazard provisions of the Building Code.

- 1.2 If the addition constitutes substantial improvement, the existing building and the addition shall comply with the flood hazard provisions of the Building Code. **B**
- 2. For horizontal additions that are not structurally interconnected to the existing building:
- 2.1 The addition shall comply with the flood hazard provisions of the Building Code.
- 2.2 If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with the flood hazard provisions of the Building Code. **B**
- 3. For vertical additions and all other proposed work, when combined, that constitute substantial improvement, the existing building shall comply with the flood hazard provisions of the Building Code. **B**
- 4. For a new, replacement, raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute substantial improvement, the existing building shall comply with the flood hazard provisions of the Building Code. **B**

# 805.0 Accessibility

805.1 Accessibility requirements: Additions shall comply with Chapter 10 of this code. B

## **806.0** Energy Conservation

**806.1** Additions to existing buildings or structures may be made to such buildings or structures without making the entire building or structure comply with the requirements of the Energy Code. The addition shall conform to the requirements of the Energy Code as they relate to new construction only, provided that the allowable amount of glass in the addition shall be based on the area of the entire building. **B** 

## 807.0 Plumbing

**807.1** In areas where public sanitary sewers are not available, existing structures that are being enlarged and discharge liquid wastes containing grease, flammable wastes, sand, solids, and other ingredients harmful to the building drainage system, shall comply with Rhode Island Department of Environmental Management (DEM) regulations. **B** 

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

# **Chapter 9. Historical Buildings**

#### 901.0 General

- **901.1** Historical buildings shall comply with the provisions of this Chapter, or with the provisions of Chapters 3, 4, 5, 6 and 7, relating to their repair, renovation, alteration, reconstruction, movement and change of occupancy. Where the owner of a historical building wishes to use an alternative to comply with the intent of specific provisions of this code, a written request shall be submitted to the authority having jurisdiction in accordance with 901.2. **BO**
- **901.1.1 Definition: Historical building (BFO)** Any building or structure that : is listed in the Rhode Island Register or National Register of Historical Places either individually or as a contributing building to a historical district; or has been issued a Determination of Eligibility by the Keeper of the National Register of

Historical Places; or

has been-designated by a city or town ordinance pursuant to RIGL 45-24.1 and has been certified by the Executive Director of the RIHPHC as contributing to the heritage of the community; or the State Historic Preservation Officer (hereinafter the SHPO), pursuant to the request of the owner, has determined as eligible to be listed on the National Register of Historical Places either individually or as a contributing building to a historical district.

- **901.1.2 Owner's responsibility:** In order to utilize the provisions of this Chapter, the building owner, or authorized representative, shall contact the Rhode Island Historical Preservation and Heritage Commission (hereinafter the RIHPHC) for written verification that the subject building qualifies as an Historical Building as defined in section 901.1.1. The building owner shall further equip the subject building with an approved fire alarm system installed in accordance with the provisions of R.I.G.L. Chapter 23-28.25 as amended. **BFO**
- **901.1.3 Modifications to historical buildings:** This chapter shall only apply to the historically significant spaces, features, or fabric of the building as certified by the Executive Director of the RIHPHC. In order to utilize the provisions of this Chapter, the building owner shall maintain the historical interior of the subject building unless such proposed modifications are determined to be incidental by the Executive Director. The Executive Director shall so advise the building and fire officials, in writing, prior to the commencement of the plan review. **BFO**
- **901.1.4 Appeals:** A building owner, utilizing the provisions of this chapter, shall notify Executive Director of the RIHPHC upon the filing of an appeal of any of the provisions of this chapter with the Joint Committee on the Rehabilitation Building and Fire Code for Existing Buildings and Structures. **BF**
- **901.2** Alternatives: Where the owner of a historical building wishes to use an alternative to comply with the intent of the specific provisions of this Code, a written request shall be

submitted to the authority having jurisdiction. Such request shall identify all non-conformities with the requirements of this Code and shall include: a statement of the requirements of this Code from which an alternative is sought, a statement of the manner in which strict compliance with the provisions of this Code would result in practical difficulties or would detract from the historical character of the building and a statement of feasible alternatives to the requirements of this Code that would adequately protect the health, safety, and welfare of the intended occupants and of the public generally. If in the opinion of the local building or fire official insufficient information has been provided in the request, the officials shall have the authority to require the submission of additional information, including an evaluation prepared by a registered architect, licensed engineer, or fire protection engineer for the appropriate subject matter. A copy of the request shall be submitted to the Executive Director of the RIHPHC including any additional information required by the authority having jurisdiction. In acting on the request, the authority having jurisdiction shall consider comments, if any, from the RIHPHC. **BFO** 

- **901.3** Accessibility requirements: The accessibility requirements contained in Chapter 10 of this code shall apply to historical buildings undergoing renovations, alterations, reconstruction or a change of occupancy. If the historical features or historical character of the building is adversely affected, and the building is required to comply with ADAAG by the provisions of Chapter 10 of this Code, then substantially equivalent alternative provisions of accessibility shall be permitted, in accordance with Chapter 10. **B**
- **901.4 Museums:** When a historical building is used as a museum, the building shall be classified as use Group B (Business) provided that the building complies with the following conditions:
- 1. A limit on occupancy, not to exceed 50, is set by the authority having jurisdiction based on egress capacity and travel distance using the following parameters:  $\mathbf{F}$
- a. For buildings with a single means of egress, occupancy shall be limited to the first and second floors, and the travel distance shall not exceed 75 feet. **F**
- b. Two means of egress shall be required from all floors above the second floor where occupancy is permitted.  ${\bf F}$
- 2. There is supervision by a guide or other employee or volunteer knowledgeable in the emergency exiting procedures during all times that the building is occupied by visitors. **F**
- **901.5 Flood hazard areas:** For historical buildings or structures located in whole or in part in flood hazard areas, work on the building or structure shall be permitted, provided all of the following are met:
- 1. If a historical building will continue to be listed or eligible for listing as a historical building, then work proposed to be undertaken is not considered to be a substantial improvement. **B**
- 2. If all work proposed constitutes substantial improvement, including repairs, work required due to a change of occupancy, and alterations, then the existing building shall comply with the flood hazard provisions of the Building Code. **B**
- 3. The proposed work is the minimum necessary to comply with life and safety requirements of this code. **B**
- 4. A variance to the flood provisions of this code is granted by the Board of Appeals. **B**

#### 902.0 Repairs

**902.1** Repairs to any portion of a historical building or structure shall be permitted to be made with original or like materials and original methods of construction, subject to the provisions of this Chapter. **B** 

# 903.0 Relocated Buildings

- **903.1** Construction: Any repair, renovation, alteration, reconstruction, movement and change of use of relocated historical structures shall comply with the requirements of this Chapter. **B**
- **903.2 Foundations:** Foundations of relocated historical buildings shall comply with Chapter 18 of the Building Code. Relocated historical buildings shall otherwise be considered as historical buildings for the purposes of this Code. **B**
- **903.3** Relocated historical buildings and structures shall be so sited that fire separation distance and opening protectives comply with the requirements of paragraphs 704.5 and 704.8 of the Building Code. **B**

## 904.0 Repair, Renovation, Alteration or Reconstruction

- **904.1 General:** Historical buildings undergoing repair, renovation, alteration or reconstruction shall comply with all of the applicable requirements of Chapters 3, 4, 5 and 6 of this code except as specifically permitted in this Chapter. **BF**
- **904.2 Replacement:** Replacement of existing or missing features using original or like materials shall be permitted. Partial replacement for repairs that match the original in configuration, height and size shall be permitted. Such replacements shall not be required to meet the materials and methods requirements in Section 401.2 of this code. **B** *Exception: Replacement glazing in hazardous locations shall comply with Section 302.1.4 of this Code.*
- **904.3 Roof Covering:** The existing type of roof covering shall be permitted to be continued and replaced with the same materials if the historical materials are documented to the satisfaction of the local jurisdiction. **B**
- **904.4 Means of egress:** In buildings protected throughout by a fire alarm system installed in accordance with section 602.6 of this Code, existing door openings, window openings intended for emergency egress and corridor and stairway widths of less than those that would be acceptable for non-historical buildings under this code shall be approved, provided that in the opinion of the local jurisdiction there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load or where other operational controls to limit occupancy are approved by the authority having jurisdiction. **F**
- **904.4.1 Paneled doors:** Existing paneled doors in corridor walls required to have a fire rating of one hour will be allowed to remain if fitted with smoke seals provided that the egress system of the entire building is equipped with an approved sprinkler system, with a head located on each

side of the door. If the above sprinkler system is not otherwise required, it may be domestically supplied provided that it is properly engineered to the satisfaction of the authority having jurisdiction. Alternative methods of establishing an approximate fire rating of twenty (20) minutes for the above doors may be approved by the authority having jurisdiction in accordance with certifications provided by nationally recognized testing facilities. **F** 

**904.4.2 Transoms:** In all buildings of Group R-2, all transoms in corridor walls in rehabilitation work areas shall be either glazed with ½ - inch wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction. **F** 

Exception: In buildings of Group R-2, where the egress system is fully sprinklered, existing transoms in corridors and other fire rated walls may be maintained if fixed in the closed position. A sprinkler head shall be installed on each side of the transom. If the above sprinkler system is not otherwise required, it may be domestically supplied provided that it is properly engineered to the satisfaction of the authority having jurisdiction.

**904.4.3 Dead end corridors:** In other than use group A, existing dead end corridors in any rehabilitation work area shall not exceed 35 feet. Newly constructed dead end corridors shall comply with NFPA 101, Life Safety Code, for new buildings. **F** 

Exceptions:

- 1. Where existing dead-end corridors of greater length are permitted by NFPA 101, Life Safety Code, for existing buildings.
- 2. In other than Group A, the maximum length of an existing dead end corridor shall be 50 feet in buildings equipped throughout with an automatic sprinkler system installed in accordance with Fire Safety Code.
- **904.5 Door swing:** Existing front or main entry doors need not swing in the direction of exit travel when serving fewer than 50 persons, or if official having jurisdiction determines that other approved exits have sufficient capacity to serve the total occupant load. **F**
- **904.6 Interior finishes:** The existing finishes of walls and ceilings shall be accepted where it is demonstrated that it is the historical finish. **F**

Exception: Finishes in exitways shall have a flame-spread classification of Class C or better in accordance with NFPA 101, Life Safety Code for new construction. Existing nonconforming materials shall be surfaced with an approved fire-retardant paint or finish unless the building is equipped throughout with an automatic fire sprinkler system installed in accordance with NFPA 13, Standard for Installation of Sprinkler Systems.

## 904.7: Stairway Enclosure

**904.7.1** Stairway enclosures may be omitted in a historical building where such stairway serves only one adjacent floor. **F** 

- **904.7.2** In buildings of three stories or less, exit enclosure construction shall limit the spread of smoke by the use of tight fitting doors and solid elements. Such elements need not have a fire rating. **F**
- **904.7.3** Riser height and tread width: When stairs are replaced or repaired, the existing or original riser height and tread width shall be permitted to remain. **F**
- **904.7.4** Approved sprinkler systems or other solutions may be considered in lieu of enclosure of a stairway. **F**
- **904.8** One-hour fire-resistive assemblies: Where one-hour fire-resistive construction is required by this code in buildings protected throughout by a fire alarm system installed in accordance with section 602.6 of this Code, one-hour construction need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is wood lathe and plaster that is in good condition and egress system doors maintain an approximate fire rating of at least twenty (20) minutes or are otherwise protected as outlined in section 904.4.1 above. **F**
- **904.8.1 Stairway railing:** Historically significant stairways shall be accepted without complying with the handrail and guardrail requirements. Existing handrails and guards shall be permitted to remain provided they are not structurally dangerous. Stairway railings may be reconstructed with handrails matching the original handrails. **F**
- **904.8.2 Guardrails:** Guardrails of at least 30 inches in height shall be accepted and the existing or original baluster spacing permitted to remain where the vertical drop does not exceed 48 inches. Historically significant guardrails of lesser dimension, deemed not to be hazardous by the authority having jurisdiction, shall also be allowed to remain. **F**
- **904.8.3** One-hour fire-resistive construction may be omitted when existing building is fully sprinklered. **F**
- **904.8.4** Occupancy separations of more than one hour may be reduced to one-hour fire-resistive construction with all openings protected by not less than  $\frac{3}{4}$  hour fire-resistive assemblies of the self-closing or automatic-closing type when building is fully sprinklered. **F**
- **904.8.5 Winders:** Existing winders that are in good structural repair will be permitted to remain in R-2 occupancies, or in buildings with an occupant load less than 50, or if there is a second approved means of egress, or if the building is protected throughout with an approved fire alarm system. **F**
- **904.9 Exit signs:** The local jurisdiction shall accept alternate exit sign or egress path marking location where such signs or markings would have an adverse effect upon the historical character. Alternative signs shall identify the exits and egress path. **F**
- **904.10 Sprinkler alternative:** After review of the report specified in 901.2 of this Code, every historical building which does not conform to the construction requirements specified in other chapters of this Code for the occupancy or use and which, due to conditions not addressed in this

Chapter in the opinion of the local fire official constitutes a fire safety hazard, shall be equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13, Standard for Installation of Sprinkler Systems. However, such automatic sprinkler system shall not be used to substitute for, or act as an alternate to, the required number of exits from any facility. **F** 

## 905.0 Change of Occupancy

- **905.1 General:** Historical buildings undergoing a change of occupancy shall comply with the applicable provisions of Chapter 7 except as specifically permitted in this Chapter. Where Chapter 7 requires compliance with specific requirements of Chapter 6, and where those requirements are subject to exceptions in Section 904.0, the same exceptions shall apply in this section. **BF**
- **905.2 Building area:** The allowable floor area for historical buildings undergoing a change of occupancy shall be permitted to exceed the allowable areas specified in Chapter 7 by fifty (50%) percent. **B**
- **905.3** Location on property: Historical structures undergoing a change of use to a higher hazard category in accordance with Section 702.4.1 of this code may use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall comply with Section 901.2. **B**
- **905.4 Roof covering:** Regardless of occupancy or use group, roof-covering materials not less than Class C shall be permitted where a fire-retardant roof covering is required. **B**
- **905.5 Means of egress:** In buildings protected throughout by a fire alarm system installed in accordance with section 602.6 of this Code or an automatic suppression system in accordance with NFPA 13 or NFPA 13R, existing door openings, window openings intended for emergency egress and corridor and stairway widths of less than those that would be acceptable for non-historical buildings under this code shall be approved, provided that in the opinion of the local jurisdiction there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load, or where other operational controls to limit occupancy are approved by the local jurisdiction. **F**
- **905.6 Door swing:** When approved by the local jurisdiction, or when the occupant load is less than 50, the existing front or main entry doors need not swing in the direction of exit travel, provided other approved exits having sufficient capacity to serve the total occupant load are provided. **F**
- **905.7 Transoms:** In corridor walls required to be fire rated by this code, existing transoms may be maintained if fixed in the closed position and fixed wired glass set in a steel frame or other approved glazing shall be installed on one side of the transom. **F**

Exception: Transoms conforming to Section 904.4.2 of this code shall be accepted.

- **905.8 Finishes:** Where finish materials are required to have a flame-spread classification of Class C or better in accordance with NFPA 101, Life Safety Code for new construction, existing nonconforming materials shall be surfaced with an approved fire-retardant paint or finish. **F** *Exception: Existing nonconforming materials need not be surfaced with an approved fire-retardant paint or finish when the building is equipped throughout with an automatic fire suppression system installed in accordance with NFPA 13, and the nonconforming materials can be substantiated as historical in character.*
- **905.9** One-hour fire-resistive assemblies: In buildings protected throughout by a fire alarm system installed in accordance with section 602.6 of this Code or an automatic suppression system in accordance with NFPA 13 or NFPA 13R, where one-hour fire-resistive construction is required by this code, it need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is wood lathe and plaster or provides an approximate twenty (20) minute rating. **F**
- **905.10 Stairs and railings:** Existing stairways shall comply with the requirements of this code. The local jurisdiction shall grant alternatives for historically significant stairways and railings if alternative stairways are found to be acceptable or if judged as meeting the intent of this Code. Existing open stairways shall comply with Section 904.10. **F**
- **905.11** Exit signs: The local jurisdiction may accept alternate exit sign locations where such signs would have an adverse effect upon the historical character. Such signs shall identify the exits and exit path. **F**
- **905.12** Exit stair live load: Existing historical stairways in buildings changed to Groups R-1 and R-2 shall be accepted where it can be shown that the stairway can support a 75 pounds per square foot live load. **B**
- **905.13 Natural light:** When it is determined by the local jurisdiction that compliance with the natural light requirements of Section 705.1 will lead to loss of historical character and/or historical materials in the building, the existing level of natural lighting shall be considered acceptable. **B**
- **905.14 Energy Conservation:** Historical buildings shall comply with the requirements of Section 706.0 to the fullest extent possible without altering the historical fabric of the building. **B**
- NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:
- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

# Chapter 10. Accessibility

#### **1001.0** General

- **1001.1** All buildings, with the exception of those determined to be historical and so certified under the provisions of Chapter 9 of this code, shall further comply with the standards outlined herein. **B**
- **1001.2** All buildings certified as historical buildings under the provisions of Chapter 9 of this code shall also comply with the standards herein. **BO**

Exception: Where such modifications to the existing building are determined, by the State Historical Preservation Officer, in writing, to adversely impact the historical significance of the building. In all such cases, the owner shall meet with the State Historical Preservation Officer, the Building Commissioner, and the State ADA Coordinator, or their respective designees, to develop alternative means of compliance with this chapter.

## 1002.0 Requirements

- **1002.1** General: Any alteration to a facility covered by this code, after passage of this code, shall be made so as to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs. **B**
- **1002.2** Alteration: For the purposes of this chapter, an alteration is a change to a place of public accommodation or a commercial facility that affects or could affect the usability of the building or facility or any part thereof. **B**
- 1002.3 Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historical restoration, changes or rearrangement in structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, re-roofing, painting or wallpapering, asbestos removal, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility. B
- **1002.4** If existing elements, spaces, or common areas are altered, then each such altered element, space, or area shall comply with the applicable provisions of the American with Disabilities Act Accessibility Guidelines (ADAAG). **B**
- **1002.5** To the maximum extent feasible: The phrase "to the maximum extent feasible", as used in this section, applies to the occasional case where the nature of an existing facility makes it virtually impossible to comply fully with applicable accessibility standards through a planned alteration. In these circumstances, the alteration shall provide the maximum physical

accessibility feasible. Any altered features of the facility that can be made accessible shall be made accessible. If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would not be feasible, the facility shall be made accessible to persons with other types of disabilities (e.g., those who use crutches, those who have impaired vision or hearing, or those who have other impairments). **B** 

#### 1003.0 Alterations: Path of Travel

- **1003.1 General.** An alteration that affects or could affect the usability of or access to an area of a facility that contains a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, unless the cost and scope of such alterations is disproportionate to the cost of the overall alteration. **B**
- **1003.2 Primary function:** A "primary function" is a major activity for which the facility is intended. Areas that contain a primary function include, but are not limited to, the customer services lobby of a bank, the dining area of a cafeteria, the meeting rooms in a conference center, as well as offices and other work areas in which the activities of the public accommodation or other private entity using the facility are carried out. Mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, and restrooms are not areas containing a primary function. **B**
- **1003.3** Alterations to an area containing a primary function: Alterations that affect the usability of or access to an area containing a primary function include, but are not limited to: **B** Remodeling merchandise display areas or employee work areas in a department store; Replacing an inaccessible floor surface in the customer service or employee work areas of a bank;

Redesigning the assembly line area of a factory; or Installing a computer center in an accounting firm.

- **1003.4** For the purposes of this section, alterations to windows, hardware, controls, electrical outlets, and signage shall not be deemed to be alterations that affect the usability of or access to an area containing a primary function. **B**
- 1003.5 Landlord/tenant: If a tenant is making alterations as defined in Section 1002.2 that would trigger the requirements of this section, those alterations by the tenant in areas that only the tenant occupies do not trigger a path of travel obligation upon the landlord with respect to areas of the facility under the landlord's authority, if those areas are not otherwise being altered. B
- **1003.6 Path of travel:** A "path of travel" includes a continuous, unobstructed way of pedestrian passage by means of which the altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility. **B**

- **1003.7** An accessible path of travel may consist of walks and sidewalks, curb ramps and other interior or exterior pedestrian ramps; clear floor paths through lobbies, corridors, rooms, and other improved areas; parking access aisles; elevators and lifts; or a combination of these elements. **B**
- **1003.8** For the purposes of this code, the term "path of travel" also includes the restrooms, telephones, and drinking fountains serving the altered area. **B**
- **1003.9 Disproportionality:** Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds twenty (20%) percent of the cost of the alteration to the primary function area. **B**
- **1003.10** Costs that may be counted as expenditures required to provide an accessible path of travel may include: **B**

Costs associated with providing an accessible entrance and an accessible route to the altered area, for example, the cost of widening doorways or installing ramps; **B** 

Costs associated with making restrooms accessible, such as installing grab bars, enlarging toilet stalls, insulating pipes, or installing accessible faucet controls; **B** 

Costs associated with providing accessible telephones, such as relocating the telephone to an accessible height, installing amplification devices, or installing a telecommunications device for deaf persons (TDD); **B** 

Costs associated with relocating an inaccessible drinking fountain. B

- **1003.11** Duty to provide accessible features in the event of disproportionality: When the cost of alterations necessary to make the path of travel to the altered area fully accessible is disproportionate to the cost of the overall alteration, the path of travel shall be made accessible to the extent that it can be made accessible without incurring disproportionate costs. **B**
- **1003.12** In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access, in the following order: **B** An accessible entrance:

An accessible route to the altered area;

At least one accessible restroom for each sex or a single unisex restroom;

Accessible telephones;

Accessible drinking fountains; and

When possible, additional accessible elements such as parking, storage, and alarms.

- **1003.13** Series of smaller alterations. The obligation to provide an accessible path of travel may not be evaded by performing a series of small alterations to the area served by a single path of travel if those alterations could have been performed as a single undertaking. **B**
- **1003.14** If an area containing a primary function has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area, or a different area on the same path of travel, are undertaken within three years of the original alteration, the total cost of alterations to the primary function areas on that path of travel during the preceding three

year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate. **B** 

**1003.15** Only alterations undertaken after the passage of this chapter shall be considered in determining if the cost of providing an accessible path of travel is disproportionate to the overall cost of the alterations. **B** 

# 1004.0 Alterations: Elevator Exemption

**1004.1** This section does not require the installation of an elevator in an altered facility that is less than three stories or has less than 3,000 square feet per story, except with respect to any facility that houses a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot, or other station used for specified public transportation, or an airport passenger terminal. **B** 

**1004.2** For the purposes of this section, "professional office of a health care provider" means a location where a person or entity regulated by a state to provide professional services related to the physical or mental health of an individual makes such services available to the public. The facility that houses a "professional office of a health care provider" only includes floor levels housing by at least one health care provider, or any floor level designed or intended for use by at least one health care provider. **B** 

**1004.3** For the purposes of this section, shopping center or shopping mall means: **B** 

A building housing five or more sales or rental establishments; or A series of buildings on a common site, connected by a common pedestrian access route above or below the ground floor, that is either under common ownership or common control or developed either as one project or as a series of related projects, housing five or more sales or rental establishments. The facility housing a "shopping center or shopping mall" only includes floor levels housing at least one sales or rental establishment, or any floor level designed or intended for use by at least one sales or rental establishment.

**1004.4** The exemption provided in Section 1004.1 does not obviate or limit in any way the obligation to comply with the other accessibility requirements established in this subpart. For example, alterations to floors above or below the accessible ground floor must be accessible regardless of whether the altered facility has an elevator. **B** 

#### 1005.0 Removal of Barriers

**1005.1 General:** A facility covered by this code shall remove architectural barriers in existing facilities, including communication barriers that are structural in nature, where such removal is readily achievable, i.e., easily accomplishable and able to be carried out without much difficulty or expense. **B** 

**1005.2 Examples:** Examples of steps to remove barriers include, but are not limited to, the following actions: **B** 

Installing ramps;

Making curb cuts in sidewalks and entrances;

Repositioning shelves;

Rearranging tables, chairs, vending machines, display racks, and other furniture;

Repositioning telephones;

Adding raised markings on elevator control buttons;

Installing flashing alarm lights;

Widening doors;

Installing offset hinges to widen doorways;

Eliminating a turnstile or providing an alternative accessible path;

Installing accessible door hardware;

Installing grab bars in toilet stalls;

Rearranging toilet partitions to increase maneuvering space;

Insulating lavatory pipes under sinks to prevent burns;

Installing a raised toilet seat;

Installing a full-length bathroom mirror;

Repositioning the paper towel dispenser in a bathroom;

Creating designated accessible parking spaces;

Installing an accessible paper cup dispenser at an existing inaccessible water fountain;

Removing high pile, low density carpeting.

**1005.3 Priorities:** A public accommodation is urged to take measures to comply with the barrier removal requirements of this section in accordance with the following order of priorities. **B** 

- **1005.3.1** First, a public accommodation should take measures to provide access to a place of public accommodation from public sidewalks, parking or public transportation. These measures include, for example, installing an entrance ramp, widening entrances, and providing accessible parking spaces. **B**
- **1005.3.2** Second, a public accommodation should take measures to provide access to those areas of a place of public accommodation where goods and services are made available to the public. These measures include, for example, adjusting the layout of display racks, rearranging tables, providing Brailled and other raised character signage, widening doors, providing visual alarms, and installing ramps. **B**
- **1005.3.3** Third, a public accommodation should take measures to provide access to restroom facilities. These measures include, for example, removal of obstructing furniture or vending machines, widening of doors, installation of ramps, providing accessible signage, widening of toilet stalls, and installation of grab bars. **B**
- **1005.3.4** Fourth, a public accommodation should take any other measures necessary to provide access to the goods, services, facilities, privileges, advantages, or accommodations of a place of public accommodation. **B**

## 1005.4 Relationship to alterations requirements of Section 1003.

- **1005.4.1** Except as provided in section 1004.2, measures taken to comply with the barrier removal requirements of this section shall comply with the applicable requirements for alterations in Sections 1002 and 1004 for the element being altered. The path of travel requirements of Section 1003 shall not apply to measures taken solely to comply with the barrier removal requirements of this section. **B**
- **1005.4.2** If, as a result of compliance with the alterations requirements specified in Section 1005.4.1 the measures required to remove a barrier would not be readily achievable, a public accommodation may take other readily achievable measures to remove the barrier that do not fully comply with the specified requirements. Such measures include, for example, providing a ramp with a steeper slope or widening a doorway to a narrower width than that mandated by the alterations requirements. No measure shall be taken, however, that poses a significant risk to the health or safety of individuals with disabilities or others. **B**
- **1005.5 Portable ramps**. Portable ramps should be used to comply with this section only when installation of a permanent ramp is not readily achievable. In order to avoid any significant risk to the health or safety of individuals with disabilities or others in using portable ramps, due consideration shall be given to safety features such as non-slip surfaces, railings, anchoring, and strength of materials. **B**
- **1005.6** Selling or serving space. The rearrangement of temporary or movable structures, such as furniture, equipment, and display racks is not readily achievable to the extent that it results in a significant loss of selling or serving space. **B**

## 1005.7 Limitation on barrier removal obligations.

- **1005.7.1** The requirements for barrier removal under Section 1005 shall not be interpreted to exceed the standards for alterations in ADAAG. **B**
- 1005.7.2 To the extent that relevant standards for alterations are not provided in Section 1005, then the requirements of Chapter 10 shall not be interpreted to exceed the standards for new construction in ADAAG. **B**
- NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:
- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

# **Chapter 11. Relocated or Moved Buildings**

#### **1101.0** General

- 1101.1 Scope: This chapter provides requirements for relocated or moved structures. B
- **1101.2 Conformance:** The building shall be safe for human occupancy as determined by the Fire Code and the Building Code. Any repair, alteration, or change in occupancy undertaken within the moved structure shall comply with the requirements of this code applicable to the work being performed. Any field-fabricated elements shall comply with the requirements of the Building Code. **BF**

## 1102.0 Requirements

- **1102.1** Location on the Lot: The building shall be located on the lot in accordance with the requirements of the Building Code. **B**
- **1102.2 Foundation:** The foundation system of relocated buildings shall comply with the Building Code **B**
- **1102.2.1** Connection to the Foundation: The connection of the relocated building to the foundation shall comply with the Building Code. **B**
- **1102.3 Wind Loads:** Building shall comply with the Building Code wind provisions. **B** *Exceptions:* 
  - 1. All use groups where wind loads at the new location are not higher than the previous location.
  - 2. Structural elements whose stress is not increased by more than five (5%) percent.
- **1102.4 Snow loads:** Structure shall comply with Building Code snow loads where snow loads at the new location are higher than the previous location. **B** *Exception: Structural elements whose stress is not increased by more than five (5%) percent.*
- **1102.5 Flood hazard areas:** If relocated or moved into a flood hazard area, structures shall comply with the Building Code Section 3107. **B**
- **1102.6 Required Inspection and Repairs:** The code official shall be authorized to inspect, or require inspection by approved professionals at the expense of the owner, the various structural parts of a relocated building to verify that structural components and connections have not sustained structural damage. Any repairs required by the code official as a result of such inspection shall be made prior to the final approval. **B**

- NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:
- "B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.
- "F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.
- "O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **Chapter 12. Construction Safeguards**

#### **1201.0** General

- **1201.1 Scope:** The provisions of the chapter shall govern safety during construction which is under the jurisdiction of this code and the protection of adjacent public and private properties. **B**
- **1201.2 Storage and placement:** Construction equipment and materials shall be stored and placed so as not to endanger the public, the workers or adjoining property for the duration of the construction project. **B**
- **1201.3 Alterations, repairs and additions:** Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during alterations, repairs or additions to any building or structure. **B**

Exceptions:

- 1. When such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
- 2. When the existing building is not occupied.
- **1201.4 Manner of removal:** Waste materials shall be removed in a manner which prevents injury or damage to persons, adjoining properties and public rights-of-way. **B**
- **1201.5 Facilities required:** Sanitary facilities shall be provided during construction or demolition activities in accordance with the International Plumbing Code. **B**
- **1201.6 Protection of pedestrians:** Pedestrians shall be protected during construction and demolition activities as required by Sections 1201.6.1 through 1201.6.7 and Table 1201.6. Signs shall be provided to direct pedestrian traffic. **B**

# Table 1201.6 PROTECTION OF PEDESTRIANS

HEIGHT OF CONSTRUCTION	DISTANCE OF CONSTRUCTION TO	TYPE OF PROTECTION REQUIRED
	LOT LINE	
	Less than 5 feet	Construction railings
8 feet or less		
	5 feet or more	None
	Less than 5 feet	Barrier and covered
		walkway
	5 feet or more, but not more	Barrier and covered
More than 8 feet	than one-fourth the height	walkway
	of construction	
	5 feet or more, but between	Barrier
	one-fourth and one-half the	
	height of construction	
	5 feet or more, but	None
	exceeding one-half the	
	height of construction	

1 foot = 304.8 mm

**1201.6.1 Walkways:** A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the appropriate authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4 feet (1219 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with Chapter 11 of the Building Code and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 psf (7.2k N/m²). **B** 

- **1201.6.2 Directional barricades:** Pedestrian traffic shall be protected by a directional barricade where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path. **B**
- **1201.6.3** Construction railings: Construction railings shall be at least 42 inches (1067 mm) in height and shall be sufficient to direct pedestrians around construction areas. **B**
- **1201.6.4 Barriers:** Barriers shall be a minimum of 8 feet (2438 mm) in height and shall be placed on the side of the walkway nearest the construction. Barriers shall extend the entire length of the construction site. Openings in such barriers shall be protected by doors which are normally kept closed. **B**
- **1201.6.4.1 Barrier design:** Barriers shall be designed to resist loads required in Chapter 10 of the Building Code unless constructed as follows: **B**

- 1. Barriers shall be provided with 2 x 4 top and bottom plates.
- 2. The barrier material shall be a minimum of ¾ inch (19.1 mm) boards or ¼ inch (6.4 mm) wood structural use panels.
- 3. Wood structural use panels shall be bonded with an adhesive identical to that for exterior wood structural use panels.
- 4. Wood structural use panels ½ inch (6.4 mm) or 1/16 inch (23.8 mm) in thickness shall have studs spaced not more than 2 feet (610 mm) on center.
- 5. Wood structural use panels 1/3 inch (9.5 mm) or ½ inch (12.7 mm) in thickness shall have studs spaces not more than 4 feet (1219 mm) on center, provided a 2 inch by 4 inch (51 mm by 102 mm) stiffener is placed horizontally at the mid-height where the stud spacing exceeds 2 feet (610 mm) on center.
- 6. Wood structural use panels 5/8 inch (15.9 mm) or thicker shall not span over 8 feet (2438 mm).
- **1201.6.5** Covered walkways: Covered walkways shall have a minimum clear height of 8 feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. Openings in the overhead structure are prohibited. In no case shall the design live load be less than 150 psf (7.2 kN/m²) for the entire structure. **B**

Exception: Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories in height are permitted to be designed for a live load of  $75 \text{ psf} (3.6 \text{kN/m}^2)$  or the loads imposed on them, whichever is greater. In lieu of such design, the roof and supporting structure of a covered walkway is permitted to be constructed as follows:

- 1. Footings shall be continuous 2 x 6 members.
- 2. Posts not less than 4 x 6 shall be provided on both sides of the roof and spaced not more than 12 feet (3658 mm) on center.
- 3. Stringers not less than 4 x 12 shall be placed on edge upon the posts.
- 4. Joists resting on the stringers shall be at least 2 x 8 and shall be spaced not more than 2 feet (610) mm on center.
- 5. The deck shall be planks at least 2 inches (51 mm) thick or wood structural panels with an exterior exposure durability classification at least 23/32 inch (18.3 mm) thick nailed to the joists.
- 6. Each post shall be knee-braced to joists and stringers by 2 x 4 minimum members 4 feet (1219 mm) long.
- 7. A 2 x 4 minimum curb shall be set on edge along the outside edge of the deck.
- **1201.6.6 Repair, maintenance and removal:** Pedestrian protection required by Section 1201.6 shall be maintained in place and kept in good order for the entire length of time pedestrians may be endangered. The owner or the owner's agent, upon the completion of the construction activity, shall immediately remove walkways, debris and other obstructions and leave such public property in as good a condition as it was before such work was commenced. **B**
- **1201.6.7 Adjacent to excavations:** Every excavation on a site located 5 feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than 6 feet (1829 mm) high. Where located more than 5 feet (1524 mm) from the street lot line, a barrier shall be erected

when required by the code official. Barriers shall be of adequate strength to resist wind pressure as specified in Chapter 10 of the Building Code. **B** 

# 1202.0 Protection of Adjoining Property

**1202.1 Protection required:** Adjoining public and private property shall be protected from damage during construction and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs. Provisions shall be made to control water run-off and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of adjoining buildings advising them that the excavation is to be made and that the adjoining buildings should be protected. Said notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavations. **B** 

## 1203.0 Temporary Use of Streets, Alleys and Public Property

- **1203.1 Storage and handling of materials:** The temporary use of streets or public property for the storage of handling of materials or of equipment required for construction or demolition and the protection provided to the public shall comply with the provisions of this chapter at the direction and to the satisfaction of the appropriate authority. **B**
- **1203.2 Obstructions:** Construction materials and equipment shall not be placed or stored so as to obstruct access to fire hydrants, standpipes, fire or police alarm boxes, catch basins or manholes, nor shall such material or equipment be located within 20 feet (6.1 m) of a street intersection, or placed so as to obstruct normal observations of traffic signals or to hinder the use of public transit loading platforms. **B**
- **1203.3 Utility fixtures:** Building materials, fences, sheds or any obstruction of any kind shall not be placed so as to obstruct free approach to any fire hydrant, fire department connection, utility pole, manhole, fire alarm box, or catch basin, or so as to interfere with the passage of water in the gutter. Protection against damage shall be provided to such utility fixtures during the progress of the work, but sight of them shall not be obstructed. **B**

## 1204.0 Fire Extinguishers

- **1204.1** Where required: All structures under construction, alteration or demolition shall be provided with not less than one approved portable fire extinguisher at each stairway of all floor levels where combustible materials have accumulated. An approved portable fire extinguisher shall be provided in every storage and construction shed. The code official is authorized to require additional approved portable fire extinguishers where special hazards exist, such as flammable or combustible liquid storage hazards. Fire extinguishers shall comply with the State Fire Code. **F**
- **1204.2** Fire hazards: The provisions of this code and of the State Fire Code shall be strictly observed to safeguard against all fire hazards attendant upon construction operations. **F**

#### 1205.0 Exits

- **1205.1 Stairways required:** Where an existing building exceeding 50 feet (15240 mm) in height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are available for egress as the construction progresses. **F**
- **1205.2 Maintenance of exits:** Required exits shall be maintained at all times during alterations and additions to any building. **F**

## 1206.0 Standpipes System

- **1206.1** Where required: Buildings required to have a standpipe system in accordance with this code shall be provided with not less than one standpipe for use during construction. Such standpipes shall be installed where the progress of construction is more than 40 feet (12192 mm) in height above the lowest level of fire department access. Such standpipes shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring. **F**
- **1206.2 Buildings being demolished:** Where a building or portion of a building is being demolished and a standpipe is existing within such a building, such standpipe shall be maintained in an operable condition so as to be available for use by the fire department. Such standpipe shall be demolished with the building but shall not be demolished more than one floor below the floor being demolished. **F**
- **1206.3 Detailed requirements:** Standpipes shall be installed in accordance with the provisions of Chapter 9 of the International Building Code. **F**

Exception: Standpipes shall be either temporary or permanent in nature, and with or without a water supply, provided that such standpipes conform to the requirements of the Building Code as to capacity, outlets, and materials.

**1206.4** Water supply: Water supply for fire protection, either temporary or permanent shall be made available as soon as combustible material accumulates. **F** 

## 1207.0 Automatic Sprinkler System

- **1207.1** Completion before occupancy: In portions of a building where an automatic sprinkler system is required by this code, it shall be unlawful to occupy those portions of the building until the automatic sprinkler system installation has been tested, approved, and placed into service. **F**
- **1207.2 Operation of valves**: Operation of sprinkler control valves shall be permitted only by properly authorized personnel and shall be accompanied by notification of duly designated parties. When the sprinkler protection is being regularly turned off and on to facilitate connection of newly completed segments, the sprinkler control valves shall be checked at the end of each work period to ascertain that protection is in service. **F**

**1208.0** Additional Fire Protection Safeguards: Additional fire protection safeguards, as outlined in Chapter 29 of the NFPA Fire Prevention Code 1, 2000 Edition, shall be utilized during construction. **F** 

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

FIRE SAFETY CODE SECTION 10 (RESERVED)

FIRE SAFETY CODE SECTION 11 (RESERVED)

FIRE SAFETY CODE SECTION 12 (RESERVED)

FIRE SAFETY CODE SECTION 13 (RESERVED)

FIRE SAFETY CODE SECTION 14 (RESERVED)

FIRE SAFETY CODE SECTION 15 (RESERVED)